


3 1761 11648783 6



Digitized by the Internet Archive
in 2023 with funding from
University of Toronto

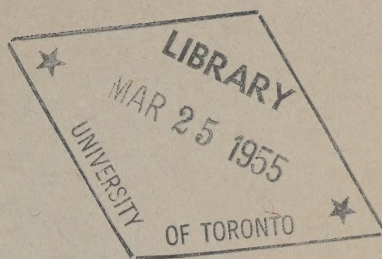
41 PW 41 Canada, Public Works, Dept. of

A55



CANADA

[44]



Annual

REPORT

of PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT

For the Fiscal Year
ended

MARCH 31

1952 / 1953

**DEPARTMENT OF
RESOURCES AND DEVELOPMENT**

DEPARTMENT OF RESOURCES AND DEVELOPMENT
Engineering and Water Resources Branch

(ANNUAL) REPORT

Proceedings Under

THE TRANS-CANADA HIGHWAY ACT

Fiscal Year Ended

MARCH 31, 1953.

Issued under the Authority of the

Honourable Robert H. Winters,

Minister of Resources and Development

Ottawa

To His Excellency the Right Honourable

Vincent Massey, C.H., Governor General and

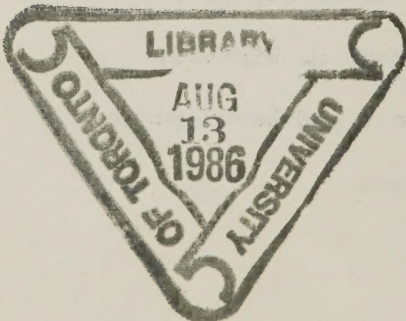
Commander-in-Chief of Canada

MAY IT PLEASE YOUR EXCELLENCY:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 40, 13 George VI, Revised Statutes of Canada, for the fiscal year ended March 31, 1953.

Respectfully submitted

ROBERT H. WINTERS
Minister of Resources and Development.



The Honourable Robert H. Winters,
Minister of Resources and Development,
Ottawa.

Sir:

I have the honour to submit the fourth
Annual Report of Proceedings under the Trans-Canada
Highway Act, Chapter 40, 13 George VI, Revised
Statutes of Canada, for the fiscal year ended
March 31, 1953.

Your obedient servant,

H. A. Young,
Deputy Minister.

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
for the
Fiscal Year Ended March 31, 1953.

The Trans-Canada Highway Act passed by Parliament became effective on December 10, 1949. Under this Act, the Minister was empowered to enter into an agreement with the Provinces for the construction of a Trans-Canada Highway. The Act provides for the Federal Government to contribute up to 50 percent of the cost of new construction and up to 50 percent of the cost of a highway which was constructed prior to the passage of the Act which can properly be incorporated in the Trans-Canada Highway. Total Federal contribution is limited to \$150,000,000. and the highway must be completed by December 9, 1956.

Following the passage of the Act, a Federal - Provincial Conference was held in Ottawa on December 15 and 16, 1949 under the chairmanship of the Honourable Robert H. Winters. All ten provinces were represented and the interested Federal Departments and Commissions had representatives in attendance. Discussions at this meeting were of a preliminary nature dealing principally

with the conditions under which the Federal Government would participate. Technical problems such as design and standards to which the highway was to be constructed were also discussed.

At a meeting held in Ottawa on April 24, 1950, which was attended by representatives of all provinces, agreements were executed with the Provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta. The Province of New Brunswick signed the Agreement on May 27, 1950 and the Province of Newfoundland signed on June 23, 1950.

On May 15, 1952, Nova Scotia became the ninth Province to conclude an agreement with the Federal Government for the construction of the Trans-Canada Highway.

Schedule "A" of the Agreement with each Province outlines the route chosen by the Province. General specifications for the construction of the highway are contained in Schedule "B" of the Agreement.

Federal Contributions

Contributions by Canada under the Act towards construction costs of the highway cover two periods:

- (1) the prior construction period, from April 1, 1928 to December 9, 1949.
- (2) the new construction period, from the date on which the province signed the Trans-Canada Highway Agreement, to December 10, 1956, the expiry date of the Act.

The Act provides that where a province has constructed a highway during the prior construction period that properly may be incorporated as part of the Trans-Canada Highway, the Governor in Council may authorize a federal contribution not exceeding 50 percent in respect of the cost to the province of the construction of the highway so incorporated. Actual payment of contributions in respect of prior costs is related under the Agreement to progress on new work.

The Act also provides for payment by Canada to the provinces of amounts not exceeding 50 percent of construction costs in respect of new work carried out on the Trans-Canada Highway during the new construction period.

While the Act provides for federal contributions for work done in the prior and new construction

periods, no provision was made for contributions for work done in the interim construction period between December 10, 1949, the date on which the Act became effective, and the date on which a province signed the Trans-Canada Highway Agreement. Provision for federal contributions for interim construction work has therefore been made by special votes of Parliament. These contributions have been administered under the same conditions as contributions for new construction.

The Trans-Canada Highway Agreement provides that Federal contributions do not vest in Canada any proprietary interest in the Highway, nor shall Canada have any responsibility for its maintenance.

All signatories have accepted in principle that the highway shall follow the shortest practical east-west route. A general description of the route which has been approved by the Federal Government is given in Appendix A of this report.

Administration

Following passage of the Act, the Trans-Canada Highway Division was established in the Depart-

ment of Resources and Development to administer federal interests in the construction of the Highway. Responsibility for design of the Highway and its construction rests initially with the provincial departments concerned. The duties of the engineers of the Trans-Canada Highway Division are to inspect, in co-operation with provincial engineers, all phases of construction and to ensure that the terms of the Federal-Provincial Agreement are carried out. The division co-operates with provincial government authorities in determining final construction costs. This is necessary in fixing the amount of the federal contribution.

The Head Office of the Division is located in Ottawa. The Division is represented in the Provinces by Supervising Engineers, working in close liaison with provincial officials. Supervising Engineers' offices are located in St. John's, Nfld.; Halifax, N.S.; Fredericton, N.B.; Toronto, Ont.; Winnipeg, Man.; Regina, Sask.; Edmonton, Alta.; and Victoria, B.C.

Field Inspecting Engineers working under the direction of the Supervising Engineers have

offices strategically located along the route of the highway and frequently inspect all work in progress. Close liaison is maintained between these engineers and provincial field engineers. Inspecting Engineers' offices are located in St. John's, Nfld.; Charlottetown, P.E.I.; Fredericton, N.B.; Ottawa, Ont.; Orillia, Ont.; Sudbury, Ont.; Port Arthur, Ont.; Winnipeg, Man.; Regina, Sask.; Swift Current, Sask.; Calgary, Alta.; Kamloops, B.C.; and Victoria, B.C.

Federal - Provincial Conferences

The results of a conference of Federal-Provincial highway officials at the technical level held in Ottawa in November of 1951, were so encouraging that it was decided to call a second conference in September of 1952. This meeting was held in Ottawa on September 15 to 17, 1952 and was attended by senior highway officials and engineers from each of the nine participating provinces, Departmental officials and the Federal Supervising Engineers.

Committees were appointed to study all phases of design, specifications and construction

practices as they affect the Trans-Canada Highway. Very satisfactory progress was made.

A Special Committee composed of Departmental officials and the senior representatives from each province discussed ways and means of achieving greater uniformity in administrative practice.

Trans-Canada Highway Colour Film

Since inception the Highway has created wide interest outside of Canada. In 1952 more than thirty requests were received from leading international journals and magazines for information and photographs. Abroad, the various missions of the Department of External Affairs received others. In response to this demand the National Film Board undertook to share with the Department costs of producing a colour film which would record construction work in progress, and also be useful in tourist promotion. During the year, camera crews were at work in British Columbia, Alberta and Saskatchewan. Scheduled for release in 1954 is a

feature length film entitled "Canada's New Main Street".

Construction Progress

Progress in building the highway was generally fairly well maintained in 1952, in spite of the heavy demands on labour and materials by the National Defence program. Steel for bridge building was again in short supply and the construction of a number of major structures had to be deferred. The removal of controls on steel at the end of December will undoubtedly accelerate this phase of the work. During the fiscal year 1952-53, 267 miles were graded and 208 miles of the highway were paved, as compared with 288 miles graded and 192 miles paved in the year 1951-52. Since work was commenced on the highway, a total of 64 bridges have been approved for construction and of this total 47 have been completed. Total payments made to the Provinces during the fiscal year 1952-53 amounted to \$13,952,545.44 as compared with \$12,791,641.30 for the previous year.

National Parks

The sum of \$500,000 was voted by Parliament for work on the Trans-Canada Highway in the National Parks. The total amount was made available to the Engineering and Architectural Division to carry out surveys and to commence construction of the highway within the Parks. Details of work undertaken are shown in the report of the Engineering and Architectural Division.

Highway Statistics

The following tables give a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1953, as well as information pertaining specifically to the fiscal year under review in this report.

TABLE NO. 1

Total Mileage of Designated Route,
Passable Mileage and Paved Mileage by
Provinces at the Time of Signing the Agreement

Participating Provinces	Total Mileage	Approximate Passable Mileage	Paved Mileage
Newfoundland	610	450	40
Prince Edward Island	74	74	30
Nova Scotia	321	321	223
New Brunswick	388	388	306
Ontario	1,412	1,250	456
Manitoba	305	305	154
Saskatchewan	414	414	139
Alberta	292	292	142
British Columbia	692	692	427
National Parks	<u>83</u>	<u>83</u>	<u>47</u>
Totals	4,591	4,269	1,964

TABLE 2

GRADING CONSTRUCTION

April 1, 1952 to March 31, 1953

Province	Miles of Grading Contracts Approved	Est. % com- pleted of all contracts approved between Dec. 10, 1949 and March 31, 1953.	Equivalent Mileage Completed
Newfoundland	26.0	59	2.5
Prince Edward Island	0.3	100	3.2
Nova Scotia	-	-	-
New Brunswick	15.6	100	16.8
Ontario	138.0	70	71.9
Manitoba	31.6	94	27.6
Saskatchewan	38.1	82	31.5
Alberta	39.3	96	86.9
British Columbia	46.3	79	26.1
Totals	<u>335.2</u>	<u>78</u>	<u>266.5</u>

December 10, 1949 to March 31, 1953

Province	Miles of Grading Contracts Approved	Estimated Per cent Completed to March 31, 1952.	Equivalent Mileage Completed
Newfoundland	207.0	59	122.0
Prince Edward Island	32.2	100	32.2
Nova Scotia	-	-	-
New Brunswick	45.6	100	45.6
Ontario	374.4	70	260.9
Manitoba	70.8	94	66.8
Saskatchewan	263.5	82	216.8
Alberta	196.9	96	188.2
British Columbia	110.5	79	87.5
Totals	<u>1,300.9</u>	<u>78</u>	<u>1,020.0</u>

TABLE 3

PAVING CONSTRUCTION

April 1, 1951 to March 31, 1953

Province	Miles of Paving Contracts Approved	Est. % com- pleted of all contracts approved between Dec. 10, 1949 and March 31, 1953	Equivalent Mileage Completed
Newfoundland	-	-	-
Prince Edward Island	9.8	100	23.5
Nova Scotia	-	-	-
New Brunswick	17.0	73	24.1
Ontario	68.4	67	34.7
Manitoba	0.2	100	17.2
Saskatchewan	45.5	62	50.4
Alberta	15.3	91	38.0
British Columbia	23.8	91	20.0
Totals	<u>180.0</u>	<u>77</u>	<u>207.9</u>

December 10, 1949 to March 31, 1953

Province	Miles of Paving Contracts Approved	Estimated Per Cent Completed to March 31, 1953	Equivalent Mileage Completed
Newfoundland	-	-	-
Prince Edward Island	31.2	100	31.2
Nova Scotia	-	-	-
New Brunswick	45.6	73	33.1
Ontario	199.4	17	133.0
Manitoba	73.5	100	73.5
Saskatchewan	149.9	62	93.3
Alberta	56.6	91	51.3
British Columbia	89.0	91	81.4
Totals	<u>645.2</u>	<u>77</u>	<u>496.8</u>

TABLE 4

LABOUR REPORT - MAN DAYS (8 HOURS) OF
"ON SITE" LABOUR ON TRANS-CANADA HIGHWAY

April 1, 1952 to March 31, 1953

Province	Field Engin- eering	Construc- tion Super- vision	Construc- tion Work	Totals
Newfoundland	2,860	4,249	26,365	33,474
Prince Edward Island	2,383	1,104	11,514	15,001
Nova Scotia	-	-	-	-
New Brunswick	3,433	474	17,632	21,539
Ontario	37,386	63,622	289,323	390,331
Manitoba	7,511	4,399	33,035	44,945
Saskatchewan	19,808	14,383	65,599	99,790
Alberta	11,066	6,282	63,368	80,716
British Columbia	13,225	19,838	89,323	122,386
Totals	<u>97,672</u>	<u>114,351</u>	<u>596,159</u>	<u>808,182</u> ^x

³⁵ Note: The total number of Man Days (8 hours) of "Off Site" labour is estimated at 1,374,000 for the same period.

December 10, 1949 to March 31, 1953

Province	Field Engin- eering	Construc- tion Super- vision	Construc- tion Work	Totals
Newfoundland	19,495	27,054	161,146	207,695
Prince Edward Island	7,617	3,481	33,229	44,327
Nova Scotia	-	-	-	-
New Brunswick	9,787	4,342	44,103	58,232
Ontario	93,265	182,590	728,631	1,004,486
Manitoba	21,867	11,964	69,512	103,343
Saskatchewan	43,572	26,857	127,163	197,592
Alberta	26,755	13,303	104,035	144,093
British Columbia	34,542	38,140	186,309	258,991
Totals	<u>256,900</u>	<u>307,751</u>	<u>1,454,128</u>	<u>2,018,759</u> ^x

^x Note: The total number of Man Days (8 hours) of "Off Site" labour is estimated at 3,432,000 for the same period.

TABLE 5

SUMMARY OF CONTRACTUAL COMMITMENTS

April 1, 1952 to March 31, 1953

Province	Approved Total Commitments	Canada's Share
	\$	\$
Newfoundland	3,087,096.57	1,543,548.29
Prince Edward Island	607,563.56	303,781.78
Nova Scotia	-	-
New Brunswick	1,866,075.00	933,037.50
Ontario	14,115,256.65	7,057,628.33
Manitoba	2,178,389.48	1,089,194.74
Saskatchewan	2,263,798.59	1,131,899.30
Alberta	4,615,307.82	2,307,653.91
British Columbia	7,150,676.90	3,575,338.45
Totals	<u>35,884,164.57</u>	<u>17,942,082.30</u>

December 10, 1949 to March 31, 1953

Province	Approved Total Commitments	Canada's Share
	\$	\$
Newfoundland	8,187,444.47	4,093,722.24
Prince Edward Island	2,124,022.65	1,062,011.32
Nova Scotia	-	-
New Brunswick	5,541,707.14	2,770,853.57
Ontario	35,124,286.49	17,562,143.24
Manitoba	5,207,167.76	2,603,583.88
Saskatchewan	8,515,863.04	4,257,931.52
Alberta	10,413,572.89	5,206,786.45
British Columbia	20,742,007.57	10,371,003.78
Totals	<u>95,856,072.01</u>	<u>47,928,036.00</u>

TABLE 6

SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS

April 1, 1952 to March 31, 1953

Province	Prior Construc- tion	Interim Construc- tion	New Construc- tion	Totals
Newfoundland	-	-	623,334.46	623,334.46
Prince Edward Island	-	-	428,816.09	428,816.09
New Brunswick	-	-	649,482.30	649,482.30
Ontario	-	-	4,103,752.94	4,103,752.94
Manitoba	-	-	963,258.26	963,258.26
Saskatchewan	-	-	1,701,244.69	1,701,244.69
Alberta	-	-	2,774,951.45	2,774,951.45
British Columbia	-	-	2,707,705.25	2,707,705.25
Totals			<u>13,952,545.44</u>	<u>13,952,545.44</u>

December 10, 1949 to March 31, 1953.

Province	Prior Construc- tion	Interim Construc- tion	New Construc- tion	Totals
Newfoundland	-	156,445.23	2,427,255.02	2,583,700.25
Prince Edward Island	-	-	962,966.96	962,966.96
New Brunswick	284,369.06	193,576.71	1,281,413.48	1,759,359.25
Ontario	1,569,640.35	337,172.88	9,969,775.12	11,876,588.35
Manitoba	121,744.07	17,958.54	1,937,216.60	2,076,919.21
Saskatchewan	-	3,103.38	2,995,577.95	2,998,681.33
Alberta	-	14,975.87	3,849,012.77	3,863,988.64
British Columbia	1,170,277.71	838,437.55	5,818,151.68	7,826,866.94
Totals	<u>3,146,031.19</u>	<u>1,561,670.16</u>	<u>29,241,369.58</u>	<u>33,949,070.93</u>

Appendix "A"

Route of the Highway

The route selected by the participating provinces which has received federal government approval may be described generally as follows:

NEWFOUNDLAND From St. John's across the Avalon Peninsula by way of Holyrood north to Clarenville and Gander and thence via Bishop's Falls and Grand Falls to Corner Brook. From Corner Brook the route proceeds southward to the Port aux Basques ferry terminus.

PRINCE EDWARD ISLAND Commencing at Wood Islands Ferry, the terminal of the Prince Edward Island-Nova Scotia ferry, thence through Millview, to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through the villages of Cornwall, Bonshaw and Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA Commencing at Sydney thence to North Sydney, Baddeck, and Port Hastings, crossing the Strait of Canso via the new causeway and thence generally via route No. 4 to Antigonish, New Glasgow, West River, Truro, Oxford, Springhill and Amherst to the Nova Scotia-New Brunswick boundary.

Connections are also to be provided to the Newfoundland ferry terminal at North Sydney, and from West River to the Prince Edward Island ferry terminal at Pictou.

NEW BRUNSWICK Commencing at the Nova Scotia boundary near Aulac, a branch of the highway will extend to Cape Tormentine to provide a connecting link with the ferry to Prince Edward Island. From Aulac, the Highway will run through Sackville to Moncton, Sussex and Jemseg to Fredericton. From Fredericton, the route will proceed via Woodstock, Grand Falls and Edmunston to the New Brunswick-Quebec interprovincial

boundary.

ONTARIO

The general route is described as proceeding from Hawkesbury near the eastern boundary of Ontario, via Ottawa, Carleton Place, Perth, Peterborough, Lindsay, Orillia, Parry Sound, Sudbury, Thessalon, Chapleau, Schreiber, Nipigon, Port Arthur, Ignace, Dryden and Kenora to the intersection of Provincial Highway No. 17 with the Manitoba boundary.

MANITOBA

From the eastern interprovincial boundary the route leads westerly to St. Boniface and Winnipeg, thence via Portage La Prairie and Carberry to the city of Brandon, thence from the west boundary of Brandon via Virden and Elkhorn, to the intersection of Saskatchewan Highway No. 1 with the Manitoba-Saskatchewan boundary.

SASKATCHEWAN

Commencing at the Manitoba boundary the route follows generally Highway No. 1

through or near Moosomin, Wapella, Whitewood, Broadview, Wolseley, Sintaluta and Indian Head, to reach Regina. West of Regina the route goes via Belle Plaine to Moose Jaw and on to Swift Current continuing to the interprovincial boundary one mile east of Walsh, Alberta.

ALBERTA

Commencing at the Saskatchewan boundary the route designated by the Province of Alberta is generally the route of the present Alberta Highway No. 1, touching Walsh, Medicine Hat, Brooks, Bassano, Gleichen and Strathmore on the way to Calgary. From Calgary the route goes to Cochrane and Canmore, thence to the intersection of the Alberta-National Park boundary at the Banff National Park East Gate.

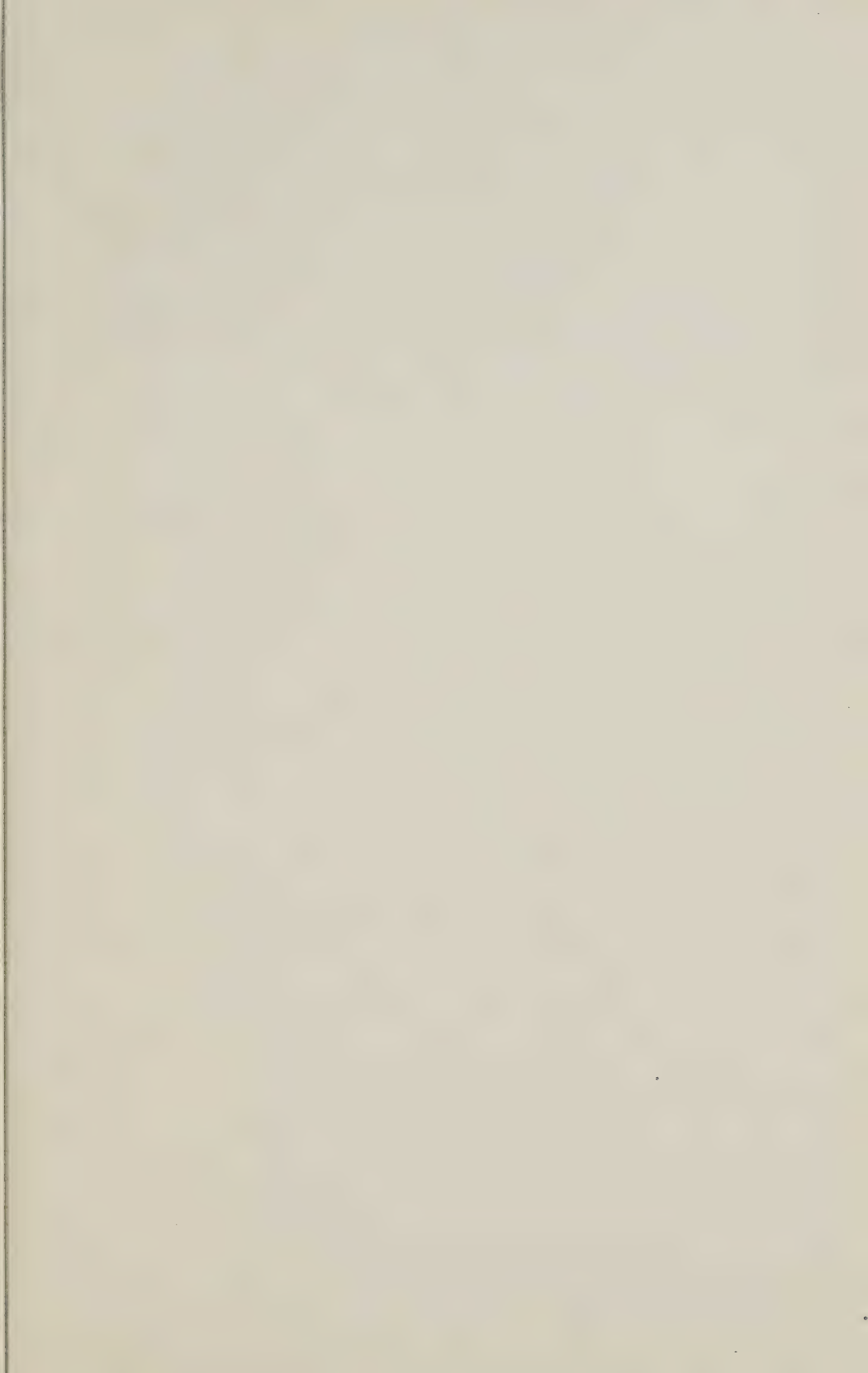
NATIONAL PARKS The federal government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 83-mile route through Banff and Yoho National Parks. This route leaving the east entrance of Banff National Park,

follows the Bow River Valley westerly to Banff and enters Yoho National Park, B.C., at the Great Divide. From the latter point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leachcoil, B.C.

BRITISH COLUMBIA From the west boundary of Yoho National Park the Trans-Canada Highway route will follow British Columbia Highway No. 1 around the Big Bend of the Columbia River from Golden to Revelstoke, and thence westward through Malakwa, Sicamous, Salmon Arm and Kamloops following the South Thompson River to Lytton and then the Fraser River Canyon and Valley route to New Westminster and Vancouver. Again, commencing in the city of Nanaimo on Vancouver Island, the route proceeds southward along British Columbia Highway No. 1, to reach the city of Victoria.

the western terminus of the Trans-
Canada Highway.

In all of the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest, practical distances successively between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.



CAI PW 41

A55

Canada. Public Works, Dept. of



CANADA

[544]

Annual

REPORT of
PROCEEDINGS
UNDER THE
TRANS-CANADA
HIGHWAY ACT

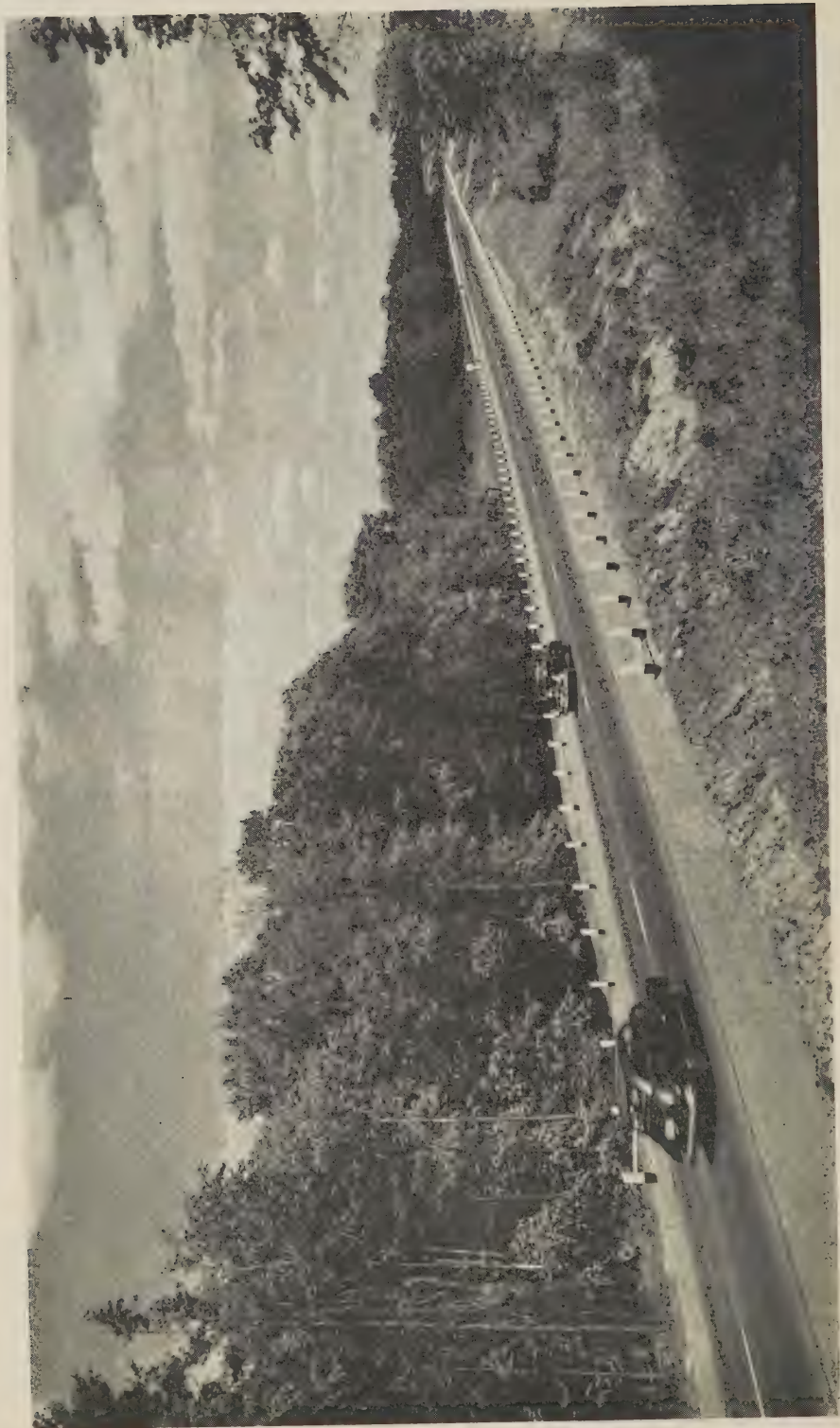
For the Fiscal Year
ended

MARCH 31

1954

(1953)

DEPARTMENT OF PUBLIC WORKS



(N. F. B. Photo)

CANADA'S NEW "MAIN STREET"
TYPICAL VIEW OF A NEWLY COMPLETED SECTION OF TRANS-CANADA HIGHWAY

DEPARTMENT OF PUBLIC WORKS
Trans-Canada Highway Division

(ANNUAL) REPORT

Proceedings Under

THE TRANS-CANADA HIGHWAY ACT

Fiscal Year Ended

MARCH 31, 1954



Issued under the Authority of the
HONOURABLE ROBERT H. WINTERS
Minister of Public Works
OTTAWA

To His Excellency the Right Honourable
VINCENT MASSEY, C.H., Governor General and
Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 40, 13 George VI, Revised Statutes of Canada, for the fiscal year ended March 31, 1954.

Respectfully submitted,

ROBERT H. WINTERS,
Minister of Public Works.

The Honourable ROBERT H. WINTERS,
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the fifth Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 40, 13 George VI, Revised Statutes of Canada, for the fiscal year ended March 31, 1954.

Your obedient servant,

H. A. YOUNG,
Deputy Minister.

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1954

During 1953 construction of the 5,000 mile Trans-Canada Highway was speeded up, although much of the work done, especially in British Columbia, Ontario, New Brunswick and Newfoundland was through the more difficult regions of the country.

Summary

From December, 1949 to March 31, 1953, funds to a total of \$95,856,072.01 were approved for commitment on contracts. During the fiscal year 1953-1954 this amount rose by approximately \$47 millions to a total of \$142,530,856.67, of which Canada's share of the highway as constructed will be 50%.

Provincial reports for the fiscal year show that the project provided 702,813 man days (8 hours) of employment along the route. An estimate of off-site labour created by the supply of materials and services toward the construction of the highway shows that a further 1,195,000 man days (8 hours) were provided across the nation.

By the end of the fiscal year at March 31, 1954, 1,483.24 miles of grading had been approved for construction since the commencement of the project in 1949, and an equivalent mileage of 1,250.9 completed.

Paving operations from 1949 to 1953 amounted to 978.59 miles of which an equivalent mileage of 806.3 was completed, a gain during 1953 in each case of 331.3 and 309.5 miles.

Construction Progress, 1953

Agreements signed between each of the participating Provinces and Canada provide that the Highway is to be completed by December 9, 1956. The provinces generally have been making progress on the Highway's construction, but unless they markedly step up their efforts on the project it appears that only the Prairie Provinces and Prince Edward Island will be able to complete their portions of the mileage in the agreed time. Nova Scotia signed an Agreement only in 1952 and is unlikely to finish on schedule, as are British Columbia and Ontario, both of which are making large expenditures but where difficulties of terrain abound. Newfoundland, with more unconstructed mileage than any other Province, also faces a difficult task. New Brunswick is behind schedule but is doing valuable work on bridges and sections of the Highway that urgently require rebuilding.

Material shortages caused by defence preparedness and the Korean War eased during 1953. Advantage was taken of the situation by builders in most Provinces, as shown in the single instance of paving, which increased 100 miles above the performance of the year before.

TRANS-CANADA HIGHWAY ACT

The Trans-Canada Highway Act passed by Parliament became effective on December 10, 1949. Under this Act, the Minister was empowered to enter into an agreement with the Provinces for the construction of a Trans-Canada Highway. The Act provides for the Federal Government to contribute up to 50 per cent of the cost of new construction and up to 50 per cent of the cost of construction of highway built prior to the passage of the Act and which can properly be incorporated in the Trans-Canada Highway. Total Federal contribution is limited to \$150,000,000 by the Act which provisions will expire on December 9, 1956.

Following the passage of the Act, a Federal-Provincial Conference was held in Ottawa on December 15 and 16, 1949 under the chairmanship of the Honourable Robert H. Winters. All ten provinces were represented and the interested Federal Departments and Commissions had representatives in attendance. Discussions at this meeting were of a preliminary nature dealing principally with the conditions under which the Federal Government would participate. Technical problems such as design and standards to which the highway was to be constructed were also discussed.

At a meeting held in Ottawa on April 24, 1950, which was attended by representatives of all provinces, agreements were executed with the Provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta. The Province of New Brunswick signed the Agreement on May 27, 1950 and the Province of Newfoundland signed on June 23, 1950.

On May 15, 1952, Nova Scotia became the ninth Province to conclude an agreement with the Federal Government for the construction of the Trans-Canada Highway.

Schedule "A" of the Agreement with each Province outlines the route chosen by the Province. General specifications for the construction of the highway are contained in Schedule "B" of the Agreement.

Federal Contributions

Contributions by Canada under the Act towards construction costs of the highway cover two periods:

- (1) the prior construction period, from April 1, 1928 to December 9, 1949.

- (2) the new construction period, from the date on which the province signed the Trans-Canada Highway Agreement, to December 10, 1956, the expiry date of the Act.

The Act provides that where a province has constructed a highway during the prior construction period that properly may be incorporated as part of the Trans-Canada Highway, the Governor in Council may authorize a federal contribution not exceeding 50 per cent in respect of the cost to the province of the construction of the highway so incorporated. Actual payment of contributions in respect of prior costs is related under the Agreement to progress on new work.

The Act also provides for payment by Canada to the provinces of amounts not exceeding 50 per cent of construction costs in respect of new work carried out on the Trans-Canada Highway during the new construction period.

While the Act provides for federal contributions for work done in the prior and new construction periods, no provision was made for contributions for work done in the interim construction period between December 10, 1949, the date on which the Act became effective, and the date on which a province signed the Trans-Canada Highway Agreement. Provision for federal contributions for interim construction work has therefore been made by special votes of Parliament. These contributions have been administered under the same conditions as contributions for new construction.

The Trans-Canada Highway Agreement provides that Federal contributions do not vest in Canada any proprietary interest in the Highway, nor shall Canada have any responsibility for its maintenance.

All signatories have accepted the principle that the highway shall follow the shortest practical east-west route. A general description of the route which has been approved by the Federal Government is given in Appendix A of this report.

ADMINISTRATION

The Trans-Canada Highway Division was transferred on September 18, 1953, from the Department of Resources and Development to the Department of Public Works, which now administers federal interests in the construction of the Highway. Responsibility for design of the Highway and its construction rests initially with the provincial departments concerned. The duties of the engineers of the Trans-Canada Highway Division are to inspect, in co-operation with provincial engineers, all phases of construction and to ensure that the terms of the Federal-Provincial Agreement are carried out. The division co-operates with provincial government authorities in determining final construction costs. This is necessary in fixing the amount of the federal contribution.

The Head Office of the Division is located in Ottawa. The Division is represented in the Provinces by Supervising Engineers, working in close liaison with provincial officials. Supervising Engineers' offices are located in St. John's, Nfld.; Halifax, N.S.; Fredericton, N.B.; Toronto, Ont.; Winnipeg, Man.; Regina, Sask.; Edmonton, Alta.; and Victoria, B.C.

Field Inspecting Engineers working under the direction of the Supervising Engineers have offices strategically located along the route of the Highway and frequently inspect all work in progress. Close liaison is maintained between these engineers and provincial field engineers. Inspecting Engineers' offices are located in St. John's, Nfld.; Charlottetown, P.E.I.; Fredericton, N.B.; Ottawa, Ont.; Orillia, Ont.; Sudbury, Ont.; Port Arthur, Ont.; Winnipeg, Man.; Regina, Sask.; Swift Current, Sask.; Calgary, Alta.; Kamloops, B.C.; and Victoria, B.C.

In September, 1953, federal responsibility for the construction of the Highway in Banff and Yoho National Parks was transferred from the Engineering and Water Resources Branch of the Department of Northern Affairs and National Resources to the Trans-Canada Highway Division of the Department of Public Works. The sum of \$1,000,000 was voted by Parliament to continue work on the 83-mile section of the Trans-Canada Highway which lies within the two parks.

STUDY IN PROGRESS

Among the interesting developments in British Columbia is the possibility of a water storage dam in the Mica Creek area of the interior of the Province on the route of the Big Bend Highway.

Erection of a dam 600' in height would flood a long portion of the Big Bend route over which the Trans-Canada Highway is to be built. During 1953 two of the Division's engineers made a reconnaissance survey of a route through Rogers Pass between Revelstoke and Golden. If the highway through this Pass were feasible it would be 100 miles shorter than the 195 mile length of the Big Bend Highway and would, at the same time, avoid the flooding problem. The results of this survey were made available to the Government of British Columbia.

ONTARIO HIGHWAY INVESTIGATION

During September 1953 irregularities were alleged to have taken place in connection with the prosecution of certain contracts for the construction of roads and highways in the Port Arthur district, some of which related to portions of the Trans-Canada Highway in that area.

Payments by the Federal Government of shared costs of construction were discontinued immediately in respect of all work in question. By the end of the fiscal year they had not been resumed. This accounts for the fact that Federal payments to Ontario as of March 31, 1954, were less than they otherwise would have been.

HIGHWAY COLOUR FILM

Since its inception, the Highway project has created wide interest outside Canada. In 1953, more than 44 requests were received from leading international newspapers and magazines for information and photographs. Abroad, the various missions of the Department of External Affairs received additional requests. Arising out of this general and public interest, the National Film Board undertook to share with the Department the costs of producing a colour motion picture film which would record construction work in progress and would also be useful in tourist promotion. During the year, camera crews were at work in Newfoundland, Prince Edward Island, Nova Scotia, New Brunswick and Ontario. It is hoped that the film, which is tentatively entitled "Canada's New Main Street", will be completed and given public release by the spring of 1956.

Highway Statistics

The following tables give a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1954, as well as information pertaining specifically to the fiscal year under review in this report:

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage by Provinces at the Time of Signing the Agreement

<i>Participating Provinces</i>	<i>Total Mileage</i>	<i>Approximate Passable Mileage</i>	<i>Paved Mileage</i>
Newfoundland.....	610	450	40
Prince Edward Island.....	74	74	30
Nova Scotia.....	321	321	223
New Brunswick.....	388	388	306
Ontario.....	1,412	1,250	456
Manitoba.....	305	305	154
Saskatchewan.....	414	414	139
Alberta.....	292	292	142
British Columbia.....	692	692	427
National Parks.....	83	83	47
Totals....	4,591	4,269	1,964

TABLE No. 2.—GRADING CONSTRUCTION

April 1, 1953 to March 31, 1954

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Estimated Percentage Completed of all Contracts Approved Between Dec. 10, 1949 and March 31, 1954</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	29·6	59	17·3
Prince Edward Island.....	11·7	88	6·4
Nova Scotia.....	1·5	—	—
New Brunswick.....	—	100	—
Ontario.....	—	82	48·3
Manitoba.....	56·6	90	48·1
Saskatchewan.....	28·9	92	53·2
Alberta.....	—	100	8·2
Banff and Yoho Parks.....	10·6	82	12·2
British Columbia.....	39·8	83	37·3
Totals.....	178·7	84	231·0

December 10, 1949 to March 31, 1954

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Estimated Percentage Completed</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	236·56	59	139·25
Prince Edward Island.....	43·88	88	38·58
Nova Scotia.....	1·50	—	—
New Brunswick.....	45·60	100	45·60
Ontario.....	374·40	82	309·20
Manitoba.....	127·40	90	114·90
Saskatchewan.....	292·40	92	270·00
Alberta.....	196·41	100	196·41
Banff and Yoho Parks.....	14·80	82	12·20
British Columbia.....	150·29	83	124·76
Totals.....	1,483·24	84	1,250·90

TABLE No. 3.—PAVING CONSTRUCTION

April 1, 1953 to March 31, 1954

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Estimated Per Cent Completed of all Contracts Approved Between Dec. 10, 1949 and March 31, 1954</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	—	—	—
Prince Edward Island.....	8.5	87	3.2
Nova Scotia.....	—	—	—
New Brunswick.....	—	100	12.5
Ontario.....	102.3	83	117.0
Manitoba.....	28.5	94	22.6
Saskatchewan.....	66.7	74	67.4
Alberta.....	67.5	88	57.8
Banff and Yoho Parks.....	10.6	52	5.8
British Columbia.....	47.2	77	23.2
Totals.....	331.3	82	309.5

December 10, 1949 to March 31, 1954

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Estimated Per Cent Completed to March 31, 1954</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	—	—	—
Prince Edward Island.....	39.65	87	34.39
Nova Scotia.....	1.50	—	—
New Brunswick.....	45.60	100	45.60
Ontario.....	301.70	83	249.99
Manitoba.....	102.00	94	96.10
Saskatchewan.....	216.60	74	160.70
Alberta.....	124.10	88	109.10
Banff and Yoho Parks.....	11.27	52	5.83
British Columbia.....	136.17	77	104.59
Totals.....	978.59	82	806.30

TABLE No 4.—LABOUR REPORT

Man Days (8 Hours) of "On Site" Labour on Trans-Canada Highway

(Compiled from Provincial Reports)

April 1, 1953 to March 31, 1954

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	4,586	8,889	50,969	64,444
Prince Edward Island..	2,513	286	3,399	6,198
Nova Scotia.....	125	—	—	125
New Brunswick.....	1,681	763	12,443	14,887
Ontario.....	35,903	43,850	209,172	288,925
Manitoba.....	7,587	3,091	35,189	45,867
Saskatchewan.....	25,395	14,101	77,424	116,920
Alberta.....	8,384	3,030	32,986	44,400
British Columbia.....	15,017	17,204	88,826	121,047
Totals.....	101,191	91,214	510,408	702,813*

*NOTE:—The total number of man days (8 hours) of "Off Site" labour is estimated at 1,195,000 for the same period.

December 10, 1949 to March 31, 1954

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	24,081	35,943	212,115	272,139
Prince Edward Island..	10,130	3,767	36,628	50,525
Nova Scotia.....	125	—	—	125
New Brunswick.....	11,468	5,105	56,547	73,120
Ontario.....	129,168	226,440	937,806	1,293,414
Manitoba.....	29,454	15,055	104,701	149,210
Saskatchewan.....	68,967	40,958	204,589	314,514
Alberta.....	35,139	16,333	137,021	188,493
British Columbia.....	49,559	55,344	275,137	380,030
Totals.....	358,091	398,945	1,964,544	2,721,580*

*NOTE:—The total number of man days (8 hours) of "Off Site" labour is estimated at 4,627,000 for the same period.

TABLE No. 5.—SUMMARY OF CONTRACTUAL COMMITMENTS

April 1, 1953 to March 31, 1954

<i>Province</i>	<i>Approved Total Commitments</i>	<i>Canada's Share</i>
Newfoundland.....	\$ 2,411,183.08	\$ 1,205,591.54
Prince Edward Island.....	421,717.59	210,858.79
Nova Scotia.....	688,545.00	344,272.50
New Brunswick.....	11,000.00	5,500.00
Ontario.....	15,737,450.17	7,868,725.08
Manitoba.....	6,605,710.21	3,302,855.10
Saskatchewan.....	5,491,410.52	2,745,705.26
Alberta.....	6,838,149.04	3,419,074.52
British Columbia.....	8,469,619.05	4,234,809.52
Totals.....	\$46,674,784.66	\$23,337,392.32

December 10, 1949 to March 31, 1954

<i>Province</i>	<i>Approved Total Commitments</i>	<i>Canada's Share</i>
Newfoundland.....	\$ 10,598,627.55	\$ 5,299,313.77
Prince Edward Island.....	2,545,740.24	1,272,870.12
Nova Scotia.....	688,545.00	344,272.50
New Brunswick.....	5,552,707.14	2,776,353.57
Ontario.....	50,861,736.66	25,430,868.33
Manitoba.....	11,812,877.97	5,906,438.99
Saskatchewan.....	14,007,273.56	7,003,636.78
Alberta.....	17,251,721.93	8,625,860.96
British Columbia.....	29,211,626.62	14,605,813.31
Totals.....	\$142,530,856.67	\$71,265,428.33

TABLE No. 6.—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
April 1, 1953 to March 31, 1954

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	—	\$ 877,203.43	\$ 877,203.43
Prince Edward Island.....	—	—	111,505.26	111,505.26
New Brunswick.....	—	—	283,730.37	283,730.37
Ontario.....	—	—	2,486,859.69	2,486,859.69
Manitoba.....	—	—	1,500,706.88	1,500,706.88
Saskatchewan.....	—	—	2,056,487.65	2,056,487.65
Alberta.....	—	—	2,732,116.80	2,732,116.80
British Columbia.....	—	—	3,330,388.16	3,330,388.16
Totals.....	—	—	\$13,378,998.24	\$13,378,998.24

December 9, 1949 to March 31, 1954

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 3,304,458.45	\$ 3,460,903.68
Prince Edward Island.....	—	—	1,074,472.22	1,074,472.22
New Brunswick.....	\$ 284,369.06	193,576.71	1,565,143.85	2,043,089.62
Ontario.....	1,569,640.35	337,172.88	12,456,634.81	14,363,448.04
Manitoba.....	121,744.07	17,958.54	3,437,923.48	3,577,626.09
Saskatchewan.....	—	3,103.38	5,052,065.60	5,055,168.98
Alberta.....	—	14,975.87	6,581,129.57	6,596,105.44
British Columbia.....	1,170,277.71	838,437.55	9,148,539.84	11,157,255.10
Totals.....	\$3,146,031.19	\$1,561,670.16	\$42,620,367.82	\$47,328,069.17

APPENDIX "A"

Route of the Highway

The route selected by the participating provinces which has received federal government approval may be described generally as follows:

NEWFOUNDLAND—From St. John's across the Avalon Peninsula by way of Holyrood north to Clarenville and Gander and thence via Bishop's Falls and Grand Falls to Corner Brook. From Corner Brook the route proceeds southward to the Port aux Basques ferry terminus.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry, the terminal of the Prince Edward Island-Nova Scotia ferry, thence through Millview, to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through the villages of Cornwall, Bonshaw and Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—Commencing at North Sydney, thence to Baddeck, and Port Hastings, crossing the Strait of Canso via the new causeway and thence generally via route No. 4 to Antigonish, New Glasgow, West River, Truro, Oxford, Springhill and Amherst to the Nova Scotia-New Brunswick boundary. Connections are also to be provided to the Newfoundland ferry terminal at North Sydney, and from West River to the Prince Edward Island ferry terminal at Pictou.

NEW BRUNSWICK—Commencing at the Nova Scotia boundary near Aulac, a branch of the highway will extend to Cape Tormentine to provide a connecting link with the ferry to Prince Edward Island. From Aulac, the Highway will run through Sackville to Moncton, Sussex and Jemseg to Fredericton. From Fredericton, the route will proceed via Woodstock, Grand Falls and Edmundston to the New Brunswick-Quebec interprovincial boundary.

ONTARIO—The general route is described as proceeding from Hawkesbury near the eastern boundary of Ontario, via Ottawa, Carleton Place, Perth, Peterborough, Lindsay, Orillia, Parry Sound, Sudbury, Thessalon, Chapleau, Schreiber, Nipigon, Port Arthur, Ignace, Dryden and Kenora to the intersection of Provincial Highway No. 17 with the Manitoba boundary.

MANITOBA—From the eastern interprovincial boundary the route leads westerly to St. Boniface and Winnipeg, thence via Portage La Prairie and Carberry to the city of Brandon, thence from the west boundary of Brandon via Virden and Elkhorn, to the intersection of Saskatchewan Highway No. 1 with the Manitoba-Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary the route follows generally Highway No. 1 through or near Moosomin, Wapella, Whitewood, Broadview, Wolseley, Sintaluta and Indian Head, to reach Regina. West of Regina the route goes via Belle Plaine to Moose Jaw and on to Swift Current continuing to the interprovincial boundary one mile east of Walsh, Alberta.

ALBERTA—Commencing at the Saskatchewan boundary the route designated by the Province of Alberta is generally the route of the present Alberta Highway No. 1, touching Walsh, Medicine Hat, Brooks, Bassano, Gleichen and Strathmore on the way to Calgary. From Calgary the route goes to Cochrane and Canmore, thence to the intersection of the Alberta-National Park boundary at the Banff National Park East Gate.

NATIONAL PARKS—The federal government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 83-mile route through Banff and Yoho National Parks. This route leaving the east entrance of Banff National Park, follows the Bow River Valley westerly to Banff and enters Yoho National Park, B.C., at the Great Divide. From the latter point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C.

BRITISH COLUMBIA—From the west boundary of Yoho National Park the Trans-Canada Highway route will follow British Columbia Highway No. 1 around the Big Bend of the Columbia River from Golden to Revelstoke, and thence westward through Malakwa, Sicamous, Salmon Arm and Kamloops following the South Thompson River to Lytton and then the Fraser River Canyon and Valley route to New Westminster and Vancouver. Again, commencing in the city of Nanaimo on Vancouver Island, the route proceeds southward along British Columbia Highway No. 1, to reach the city of Victoria, the western terminus of the Trans-Canada Highway.

In all of the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest, practical distances successively between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

EDMOND CLOUTIER, C.M.G., O.A., D.S.P.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1955

AI PW 41

A55

Canada. Public Works, Dept. of



CANADA



Annual

REPORT of

PROCEEDINGS

UNDER THE

TRANS-CANADA

HIGHWAY ACT

**For the Fiscal Year
ended**

MARCH 31

1955

DEPARTMENT OF PUBLIC WORKS



CANADA'S NEW MAIN STREET
NEWLY COMPLETED SECTION IN BRITISH COLUMBIA'S THOMPSON RIVER VALLEY

DEPARTMENT OF PUBLIC WORKS
Trans-Canada Highway Division

ANNUAL REPORT

Proceedings Under

THE TRANS-CANADA HIGHWAY ACT

Fiscal Year Ended

MARCH 31, 1955



Issued under the Authority of the
HONOURABLE ROBERT H. WINTERS
Minister of Public Works
OTTAWA

To His Excellency the Right Honourable
VINCENT MASSEY, C.H., Governor General and
Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1955.

Respectfully submitted,

ROBERT H. WINTERS,
Minister of Public Works.

The Honourable ROBERT H. WINTERS,
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the sixth Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1955.

Your obedient servant,

H. A. YOUNG,
Deputy Minister.

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1955
TRANS-CANADA HIGHWAY ACT

The Trans-Canada Highway Act passed by Parliament became effective on December 10, 1949. Under this Act, the Minister was empowered to enter into an agreement with the Provincial Governments for the construction of a Trans-Canada Highway. The Act provides for the Federal Government to contribute up to 50 per cent of the cost of new construction and up to 50 per cent of the cost of construction of highway built prior to the passage of the Act and which can properly be incorporated in the Trans-Canada Highway. Total Federal contribution is limited to \$150,000,000 by the Act which will expire on December 9, 1956.

Following the passage of the Act, a Federal-Provincial Conference was held in Ottawa on December 15 and 16, 1949, under the chairmanship of the Honourable Robert H. Winters. All ten provinces were represented and the interested Federal Departments and Commissions had representatives in attendance. Discussions at this meeting were of a preliminary nature dealing principally with the conditions under which the Federal Government would participate. Technical problems such as design and standards to which the Highway was to be constructed were also discussed.

At a meeting held in Ottawa on April 24, 1950, which was attended by representatives of all provinces, agreements were executed with the provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta. The Province of New Brunswick signed the Agreement on May 27, 1950.

The Province of Newfoundland signed on June 23, 1950, and on May 15, 1952, Nova Scotia became the ninth province to conclude an agreement with the Federal Government for the construction of the Trans-Canada Highway.

Schedule "A" of the Agreement with each province outlines the route chosen by the province. General specifications for the construction of the Highway are contained in Schedule "B" of the Agreement.

Federal Contributions

Contributions by Canada under the Act towards construction costs of the Highway cover two periods:

- (1) the prior construction period, from April 1, 1928, to December 9, 1949.
- (2) the new construction period, from the date on which the province signed the Trans-Canada Highway Agreement, to December 10, 1956, the expiry date of the Act.

The Act provides that where a province has constructed a highway during the prior construction period that properly may be incorporated as part of the Trans-Canada Highway, the Governor in Council may authorize a Federal contribution not exceeding 50 per cent in respect of the cost to the province of the construction of the Highway so incorporated. Actual payment of contributions in respect of prior costs is related under the Agreement to progress on new work.

The Act also provides for payment by Canada to the provinces of amounts not exceeding 50 per cent of construction costs in respect of new work carried out on the Trans-Canada Highway during the new construction period.

While the Act provides for Federal contributions for work done in the prior and new construction periods, no provision was made for contributions for work done in the interim construction period between December 10, 1949, the date on which the Act became effective, and the date on which a province signed the Trans-Canada Highway Agreement. Provision for Federal contributions for interim construction work has therefore been made by special votes of Parliament. These contributions have been administered under the same conditions as contributions for new construction.

The Trans-Canada Highway Agreement provides that Federal contributions do not vest in Canada any proprietary interest in the Highway, nor shall Canada have any responsibility for its maintenance.

All signatories have accepted the principle that the Highway shall follow the shortest practical east-west route. A general description of the route which has been approved by the Federal Government is given in Appendix "A" of this report.

ADMINISTRATION

Responsibility for design of the Highway and its construction rests initially with the provincial departments concerned. The duties of the engineers of the Trans-Canada Highway Division are to inspect, in co-operation with provincial engineers, all phases of construction and to ensure that the terms of the Federal-Provincial Agreement are carried out. The division co-operates with Provincial Government authorities in determining final construction costs. This is necessary in fixing the amount of the Federal contribution.

The Head Office of the Division is located in Ottawa. The Division is represented in the provinces by Supervising Engineers, working in close liaison with provincial officials. Supervising Engineers' offices are located in St. John's, Nfld.; Halifax, N.S.; Fredericton, N.B.; Toronto, Ont.; Winnipeg, Man.; Regina, Sask.; Edmonton, Alta.; and Victoria, B.C.

Field inspecting engineers working under the direction of the Supervising Engineers have offices strategically located along the route of the Highway and frequently inspect all work in progress. Close liaison is maintained between these engineers and provincial field engineers. Inspecting engineers' offices are located in St. John's, Nfld.; Charlottetown, P.E.I.; Ottawa, Ont.; Orillia, Ont.; Sudbury, Ont.; Port Arthur, Ont.; Winnipeg, Man.; Regina, Sask.; Swift Current, Sask.; Calgary, Alta.; Kamloops, B.C.; and Victoria, B.C.

CONSTRUCTION PROGRESS—1954

Unfavourable weather conditions during the early part of the construction season seriously interfered with the building of the Highway and by late summer most of the provinces were considerably behind schedule, particularly in the prairie provinces. Exceptionally fine fall weather enabled them to speed up their operations and by the end of the year, long continuous stretches of the Highway came into general use. It is now apparent that there is little likelihood of any of the provinces completing their section of the Highway before the Agreement expires on December 10, 1956.

In Newfoundland, work has been largely confined to grading and graveling a new road on an entirely new location and the construction of the necessary bridges. By the end of the year a total of 175 miles had been graded and gravelled and of 23 bridges which had been approved for construction, 15 were reported to be complete. No new paving has yet been done in the province.

Work in Nova Scotia has largely confined to preliminary investigations and the relocation and construction of new bridges and their approaches and connecting links. Two grading contracts totalling 12 miles on Cape Breton Island were started but progress was seriously delayed by wet weather. Work on the Canso Causeway, which lies on the route of the Trans-Canada Highway, proceeded rapidly and it is expected that it will be opened for Trans-Canada traffic in the summer of 1955.

Prince Edward Island continued to make steady progress and has now completed approximately 65 per cent of its portion of the Highway. A causeway was constructed across the North River, just west of Charlottetown, to replace an obsolete bridge.

New Brunswick continued the extension of the Highway from Fredericton via Youngs Cove to Sussex and approximately 21 miles of grading and base course were built between Youngs Cove and Berwick. Two bridges at Coles Island were put under construction.

In Ontario, good progress was made on the section between the Ontario-Quebec Boundary and Ottawa and between Ottawa and Peterborough. Good progress is also being made on various sections of the Highway between Orillia and Sudbury and in the vicinity of Massey and Iron Bridge, as well as at a number of points between Chapleau and the Ontario-Manitoba boundary. A total of 64 miles were graded and 65 miles were paved during the year.

In the Prairie Provinces good progress was made in spite of adverse weather conditions which prevailed early in the season. By the end of the year, Manitoba had completed the paving of 130 miles of its total of 305; Saskatchewan 230 miles of a total of 414 and Alberta 150 miles of a total of 292.

In British Columbia work was largely confined to the more difficult and rugged sections of the Highway and good progress was made. During the year 38 miles of new grading and 35 miles of paving were completed. Since the beginning of the Agreement a total of 140 miles of the 692 miles in the province have been completed. Serious slides occurred in the very rugged sections between Golden and Yoho Park in the Kicking Horse Canyon and work was seriously delayed.

SUMMARY

At the end of March, 1955, a total of 1,477 miles of new grading and 1,075 miles of paving had been completed; of 152 structures authorized, 115 were completed.

A total of 227 miles were graded and 268 miles were paved during the year as compared with 231 miles of grading and 310 miles of paving completed the previous year.

Payments to the provinces as Canada's share of construction cost for the fiscal year amounted to \$18,133,982.10 as compared with \$13,378,998.24 in the previous year. The increase is largely accounted for by the resumption of payments to the Province of Ontario.

Provincial labour reports show that 702,373 man days (8 hours) on-site-labour and an estimated additional 1,194,034 man days of off-site-labour were provided during the year.

National Parks

The Trans-Canada Highway Division is responsible for the construction of the Highway in Banff and Yoho National Parks. Preliminary investigations and a location survey were completed and cost estimates prepared to determine the relative merits of constructing the Highway on the north or south side of Bow River, between Banff and Lake Louise. These investigations revealed that the south side presented a better and more economical route. Location surveys in Banff and Yoho Parks were completed with the exception of a short section between Lake Louise and Field, which should be completed early in 1955.

Two new grading contracts extending over a two-year period were awarded between Mile 4 and Mile 16 easterly from the west gate of Yoho Park. Progress was disappointing due to the very unfavourable soil conditions which were encountered and which necessitated a large amount of relocation and heavy overrun in the original estimated quantities. Better progress can be expected next season.

Contracts for the construction of the subgrade and base course, which were carried over from the previous year, from the east gate of Banff Park westerly towards Banff (Mile 0 to Mile 10.8) and from the west gate of Yoho Park easterly for 4 miles (Mile 0 to Mile 4), were completed. Bridges across the Kicking Horse River at approximately Mile 4 in Yoho Park and across the Cascade River in Banff Park, were also completed.

Arrangements were made with the National Parks Branch of the Department of Northern Affairs and National Resources, to complete the clearing of the right-of-way in Banff and Yoho Parks as a day labour operation. This operation was very successful and during the winter the entire right-of-way was cleared with the exception of approximately 15 miles in Banff and Yoho Parks where the location of the Highway had not been finally decided.

With most of the preliminary engineering and clearing of the right-of-way now completed construction of the Highway can be stepped up in 1955.

HIGHWAY COLOUR FILM

Since its inception, the Highway project has created wide interest outside Canada. Arising out of this general and public interest, the National Film Board undertook to share with the Department the costs of producing a colour motion picture film which would record construction work in progress and would also be useful in tourist promotion. During the year, more work was undertaken to complete the film, which is tentatively entitled "Canada's New Main Street", and will be given public release by the spring of 1956.

Highway Statistics

The following tables give a statistical presentation of progress on the Highway from December 10, 1949, to March 31, 1955, as well as information pertaining specifically to the fiscal year under review in this report:

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage by Provinces at the Time of Signing the Agreement

<i>Participating Provinces</i>	<i>Total Mileage</i>	<i>Approximate Passable Mileage</i>	<i>Paved Mileage</i>
Newfoundland.....	610	450	40
Prince Edward Island.....	74	74	30
Nova Scotia.....	321	321	223
New Brunswick.....	388	388	306
Ontario.....	1,412	1,250	456
Manitoba.....	305	305	154
Saskatchewan.....	414	414	139
Alberta.....	292	292	142
British Columbia.....	692	692	427
National Parks.....	83	83	47
Totals.....	4,591	4,269	1,964

TABLE No. 2.—GRADING CONSTRUCTION

April 1, 1954 to March 31, 1955

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	52.7	36.2
Prince Edward Island.....	11.1	16.1
Nova Scotia.....	21.3	8.7
New Brunswick.....	22.3	13.2
Ontario.....	29.0	64.0
Manitoba.....	9.6	2.5
Saskatchewan.....	60.1	47.1
Alberta.....	17.9	0.0
Banff and Yoho Parks.....	11.4	0.8
British Columbia.....	36.3	37.6
Totals.....	271.7	226.2

December 10, 1949 to March 31, 1955

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Estimated Percentage Completed</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	289.3	61	175.4
Prince Edward Island.....	55.0	99	54.7
Nova Scotia.....	22.8	38	8.7
New Brunswick.....	67.9	87	58.8
Ontario.....	403.4	93	373.2
Manitoba.....	137.0	86	117.4
Saskatchewan.....	352.5	90	317.1
Alberta.....	214.3	91	196.4
Banff and Yoho Parks.....	26.2	50	13.0
British Columbia.....	186.6	87	162.4
Totals.....	1,755.0	84	1,477.1

TABLE No. 3.—PAVING CONSTRUCTION

April 1, 1954 to March 31, 1955

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	—	—
Prince Edward Island.....	8.6	11.7
Nova Scotia.....	14.2	4.0
New Brunswick.....	14.9	6.6
Ontario.....	36.2	64.8
Manitoba.....	33.7	34.0
Saskatchewan.....	49.8	69.7
Alberta.....	59.2	41.8
Banff and Yoho Parks.....	0.0	0.0
British Columbia.....	33.6	35.1
Totals.....	250.2	267.7

December 10, 1949, to March 31, 1955

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Estimated Per Cent Completed to March 31, 1955</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	—	—	—
Prince Edward Island.....	48.2	96	46.1
Nova Scotia.....	15.7	25	4.0
New Brunswick.....	60.5	86	52.2
Ontario.....	337.9	93	314.8
Manitoba.....	135.7	96	130.1
Saskatchewan.....	266.4	86	230.4
Alberta.....	183.3	82	150.9
Banff and Yoho Parks.....	11.3	51	5.8
British Columbia.....	169.8	82	139.7
Totals.....	1,228.8	87	1,074.0

TABLE No. 4.—LABOUR REPORT

Man Days (8 hours) of "On Site" on Trans-Canada Highway

(Compiled from Provincial Reports)

April 1, 1954 to March 31, 1955

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	9,147	11,857	82,425	103,429
Prince Edward Island...	3,861	882	9,854	14,597
Nova Scotia.....	5,808	2,239	14,770	22,817
New Brunswick.....	2,608	1,253	15,076	18,937
Ontario.....	35,950	24,527	161,755	222,232
Manitoba.....	4,793	2,897	40,760	48,450
Saskatchewan.....	23,894	14,766	54,040	92,700
Alberta.....	11,327	3,688	27,202	42,217
Banff & Yoho Parks....	4,115	603	23,198	27,916
British Columbia.....	14,513	14,065	80,500	109,078
Totals.....	116,016	76,777	509,580	702,373

*NOTE:—The total number of man days (8 hours) of "Off Site" labour is estimated at 1,194,034 for the same period.

December 10, 1949 to March 31, 1955

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	33,228	47,800	294,540	375,568
Prince Edward Island...	13,991	4,649	46,482	65,122
Nova Scotia.....	6,551	2,536	16,703	25,790
New Brunswick.....	14,076	6,358	71,623	92,057
Ontario.....	165,118	250,967	1,099,561	1,515,646
Manitoba.....	34,247	17,952	145,461	197,660
Saskatchewan.....	92,861	55,724	258,629	407,214
Alberta.....	46,466	20,021	164,223	230,710
Banff & Yoho Parks....	4,115	603	23,198	27,916
British Columbia.....	64,072	69,409	355,637	489,118
Totals.....	474,725	476,019	2,476,057	3,426,801

*NOTE:—The total number of man-days (8 hours) of "Off Site" labour is estimated at 5,825,562 for the same period.

TABLE No. 5.—SUMMARY OF CONTRACTUAL COMMITMENTS

April 1, 1954 to March 31, 1955

<i>Province</i>	<i>Approved Total Commitments</i>	<i>Canada's Share</i>
Newfoundland.....	\$ 5,486,403.50	\$2,743,201.75
Prince Edward Island.....	1,155,780.00	577,890.00
Nova Scotia.....	1,452,000.00	726,000.00
New Brunswick.....	1,662,527.00	831,263.50
Ontario.....	6,770,750.00	3,385,375.00
Manitoba.....	1,957,547.00	978,773.50
Saskatchewan.....	4,066,792.57	2,033,396.28
Alberta.....	6,012,720.00	3,006,360.00
British Columbia.....	8,001,207.00	4,000,603.50
Totals.....	\$36,565,727.07	\$18,282,863.53

December 10, 1949 to March 31, 1955

<i>Province</i>	<i>Approved Total Commitments</i>	<i>Canada's Share</i>
Newfoundland.....	\$ 16,085,031.05	\$ 8,042,515.53
Prince Edward Island.....	3,701,520.24	1,850,760.12
Nova Scotia.....	2,140,545.00	1,070,272.50
New Brunswick.....	7,215,234.14	3,607,617.07
Ontario.....	57,632,486.66	28,816,243.33
Manitoba.....	13,770,424.97	6,885,212.48
Saskatchewan.....	18,074,066.13	9,037,033.06
Alberta.....	23,264,441.93	11,632,220.97
British Columbia.....	37,212,833.62	18,606,416.81
Totals.....	\$179,096,583.74	\$89,548,291.87

TABLE No. 6.—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
April 1, 1954 to March 31, 1955

Province	Prior Construction	Interim Construction	New Construction	Totals
Newfoundland.....	—	—	\$ 2,017,828.92	\$ 2,017,828.92
Prince Edward Island.....	—	—	23,142.88	23,142.88
Nova Scotia.....	—	—	75,699.97	75,699.97
New Brunswick.....	—	—	510,470.31	510,470.31
Quebec.....	—	—	—	—
Ontario.....	—	—	6,274,487.50	6,274,487.50
Manitoba.....	\$384,610.38	—	1,692,403.22	2,077,013.60
Saskatchewan.....	—	—	1,996,621.96	1,996,621.96
Alberta.....	—	—	1,806,477.94	1,806,477.94
British Columbia.....	—	—	3,352,239.02	3,352,239.02
Totals.....	\$384,610.38	—	\$17,749,371.72	\$18,133,982.10

December 10, 1949 to March 31, 1955

Province	Prior Construction	Interim Construction	New Construction	Totals
Newfoundland.....	—	\$ 156,445.23	\$ 5,322,287.37	\$ 5,478,732.60
Prince Edward Island.....	—	—	1,097,615.10	1,097,615.10
Nova Scotia.....	—	—	75,699.97	75,699.97
New Brunswick.....	\$ 284,369.06	193,576.71	2,075,610.16	2,553,559.93
Quebec.....	—	—	—	—
Ontario.....	1,569,640.35	337,172.88	18,731,122.31	20,637,935.54
Manitoba.....	506,354.45	17,958.54	5,130,326.70	5,654,639.69
Saskatchewan.....	—	3,103.38	7,048,687.56	7,051,790.94
Alberta.....	—	14,975.87	8,387,607.51	8,402,583.38
British Columbia.....	1,170,227.71	838,437.55	12,500,778.86	14,509,494.12
Totals.....	\$3,530,641.57	\$1,561,670.16	\$60,369,739.54	\$65,462,051.27

APPENDIX "A"

Route of the Highway

The route selected by the participating provinces which has received Federal Government approval may be described generally as follows:

NEWFOUNDLAND—From St. John's across the Avalon Peninsula by way of Holyrood north to Clarenville and Gander and thence via Bishop's Falls and Grand Falls to Corner Brook. From Corner Brook the route proceeds southward to the Port aux Basques ferry terminus.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry, the terminatl of the Prince Edward Island-Nova Scotia ferry, thence through Millview, to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through the villages of Cornwall, Bonshaw and Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—Commencing at North Sydney, thence to Baddeck, and Port Hastings, crossing the Strait of Canso via the new causeway and thence generally via route No. 4 to Antigonish, New Glasgow, West River, Truro, Oxford, Springhill and Amherst to the Nova Scotia-New Brunswick boundary. Connections are also to be provided to the Newfoundland ferry terminal at North Sydney, and from West River to the Prince Edward Island ferry terminal at Pictou.

NEW BRUNSWICK—Commencing at the Nova Scotia boundary near Aulac, a branch of the highway will extend to Cape Tormentine to provide a connecting link with the ferry to Prince Edward Island. From Aulac, the Highway will run through Sackville to Moncton, Sussex and Jemseg to Fredericton. From Fredericton, the route will proceed via Woodstock, Grand Falls and Edmundston to the New Brunswick-Quebec interprovincial boundary.

ONTARIO—The general route is described as proceeding from Hawkesbury near the eastern boundary of Ontario, via Ottawa, Carleton Place, Perth, Peterborough, Lindsay, Orillia, Parry Sound, Sudbury, Thessalon, Chapleau, Schreiber, Nipigon, Port Arthur, Ignace, Dryden and Kenora to the intersection of Provincial Highway No. 17 with the Manitoba boundary.

MANITOBA—From the eastern interprovincial boundary the route leads westerly to St. Boniface and Winnipeg, thence via Portage la Prairie and Carberry to the city of Brandon, thence from the west boundary of Brandon via Virden and Elkhorn, to the intersection of Saskatchewan Highway No. 1 with the Manitoba-Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary the route follows generally Highway No. 1 through or near Moosomin, Wapella, Whitewood, Broadview, Wolseley, Sintaluta and Indian Head, to reach Regina. West of Regina the route goes via Belle Plaine to Moose Jaw and on to Swift Current continuing to the interprovincial boundary one mile east of Walsh, Alberta.

ALBERTA—Commencing at the Saskatchewan boundary the route designated by the Province of Alberta is generally the route of the present Alberta Highway No. 1, touching Walsh, Medicine Hat, Brooks, Bassano, Gleichen and Strathmore on the way to Calgary. From Calgary the route goes to Cochrane and Canmore, thence to the intersection of the Alberta-National Park boundary at the Banff National Park East Gate.

NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 83-mile route through Banff and Yoho National Parks. This route leaving the east entrance of Banff National Park, follows the Bow River Valley westerly to Banff and enters Yoho National Park, B.C., at the Great Divide. From the latter point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C.

BRITISH COLUMBIA—From the west boundary of Yoho National Park the Trans-Canada Highway route will follow British Columbia Highway No. 1 around the Big Bend of the Columbia River from Golden to Revelstoke, and thence westward through Malakwa, Sicamous, Salmon Arm and Kamloops following the South Thompson River to Lytton and then the Fraser River Canyon and Valley route to New Westminster and Vancouver. Again, commencing in the city of Nanaimo on Vancouver Island, the route proceeds southward along British Columbia Highway No. 1, to reach the city of Victoria, the western terminus of the Trans-Canada Highway.

In all of the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest, practical distances successively between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway

1. RIGHT OF WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB BASE ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

EDMOND CLOUTIER, C.M.G., O.A., D.S.P.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1956

AI PW 41

A55

Canada. Public Works, Dept. of

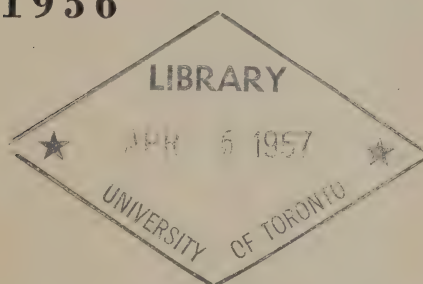


CANADA

Annual

**REPORT of
PROCEEDINGS
UNDER THE
TRANS-CANADA
HIGHWAY ACT**

**For the Fiscal Year ended
MARCH 31
1956**



DEPARTMENT OF PUBLIC WORKS



CANADA'S NEW MAIN STREET

SECTION OF TRANS-CANADA HIGHWAY UNDER CONSTRUCTION AT MILE 12 IN BANFF NATIONAL PARK

DEPARTMENT OF PUBLIC WORKS
Trans-Canada Highway Division

ANNUAL REPORT
Proceedings Under
THE TRANS-CANADA HIGHWAY ACT
Fiscal Year Ended
MARCH 31, 1956



Issued under the Authority of the
HONOURABLE ROBERT H. WINTERS
Minister of Public Works
OTTAWA

To His Excellency the Right Honourable
VINCENT MASSEY, C.H., Governor General and
Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1956.

Respectfully submitted,

ROBERT H. WINTERS,
Minister of Public Works

The Honourable ROBERT H. WINTERS,
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the seventh Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1956.

Your obedient servant,

H. A. YOUNG,
Deputy Minister

CONTENTS

	PAGE
TRANS-CANADA HIGHWAY ACT.....	1
GENERAL REVIEW FOR 1955.....	1
FEDERAL CONTRIBUTIONS.....	2
ADMINISTRATION.....	3
SUMMARY.....	3
Financial.....	3
Labour.....	3
Progress.....	3
FEDERAL PROVINCIAL HIGHWAY CONFERENCE NOVEMBER 1955...	4
TRANS-CANADA HIGHWAY THROUGH NATIONAL PARKS.....	4
HIGHWAY STATISTICS.....	5
Table 1—Milage, etc.....	5
Table 2—Grading Construction.....	6
Table 3—Paving Construction.....	7
Table 4—Labour Report.....	8
Table 5—Summary of General Contracts.....	9
Table 6—Summary of Payments, etc.....	10
APPENDICES	
A—Schedule A—Route of Highway.....	11
B—Schedule B—General Specifications.....	13
C—Federal Supervising Engineers.....	15

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1956

THE TRANS-CANADA HIGHWAY ACT

The Trans-Canada Highway Act passed by Parliament became effective on December 10, 1949. Under this Act, the Minister was empowered to enter into agreements with the Provincial Governments for the construction of a Trans-Canada Highway. The Act provides for the Federal Government to contribute up to 50 per cent of the cost of new construction and up to 50 per cent of the cost of construction of highway built prior to the passage of the Act and which can be properly incorporated in the Trans-Canada Highway. Total Federal contribution is limited to \$150,000,000.00 by the Act which expires on December 9, 1956.

At a meeting held in Ottawa on April 24, 1950, which was attended by representatives of all provinces, agreements were executed with the Provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta. The Province of New Brunswick signed the Agreement on May 27, 1950. The Province of Newfoundland signed on June 23, 1950, and on May 15, 1952, Nova Scotia became the ninth province to conclude an agreement with the Federal Government for the construction of the Trans-Canada Highway.

Schedule "A" of the Agreement with each province designates the route within the province. General specifications for the construction of the Highway are contained in Schedule "B" of the Agreement. These schedules are shown in Appendices "A" and "B".

GENERAL REVIEW OF 1955

Provincial efforts were directed towards completion of work which had not been finished during the previous year because of bad weather conditions, and towards the maintenance of the general pace of grading and paving. Though construction was again slowed to some extent by weather conditions, 273 miles of grading and an additional 245 miles of paving were added to the east-west national highway system.

At the year's end, grading in Newfoundland had been completed along 215 miles of the Trans-Canada location. Of the 29 bridges approved for completion, 21 had been built and the remainder were 65% completed.

In spite of the fact that surveys were delayed by record snowfall in 1955, Nova Scotia reached a decision on the final location of a number of sections of the Highway and these are now approaching the construction stage. Over the route, 32 miles have been graded, 18 paved, and five of six approved bridges completed. The Canso Causeway linking Cape Breton Island with the mainland was officially opened on August 18, 1955.

The construction of the Causeway was a joint project of the Federal Department of Transport and the Province of Nova Scotia. While its construction does not come under the Trans-Canada Highway Agreement, the Causeway does form a major link in the Highway.

Prince Edward Island has finished construction on three-quarters of its route and it is expected good progress will be maintained during the coming year.

New Brunswick extended its grading and paving from Fredericton via Young's Cove towards Sussex, and prepared plans for further work. At Cole's Island, construction on two bridges reached the half-way mark.

With the section of the Highway extending from the Quebec-Ontario interprovincial boundary to the City of Ottawa practically completed, construction in Ontario moved west and north to the areas of Parry Sound and the difficult terrain from east of Marathon, west to the Manitoba border. In the region west of Marathon, Ont., a total of 43 miles were graded and 35 miles were paved during the year.

Through the Prairie Provinces, Manitoba brought to completion half of its section of the route, Saskatchewan three-quarters, and Alberta two-thirds, for a total of 654 miles of completed Highway along the 1,011 mile length of this section. A new route south of the Bow River from Calgary to Banff was approved.

British Columbia continued to make good progress in construction over difficult terrain. A quarter of the 692 mile Highway crossing the Province has now been engineered and completed, with a further 27 miles prepared for base course and final surfacing. Of the 44 bridges approved for building, 39 are in service. The average completion of the remaining structures is estimated at 56%.

Along the route of the Trans-Canada Highway it is now proposed to construct by-passes of a number of cities. Among those under consideration for construction are by-passes at Moncton and Fredericton, New Brunswick; Lindsay, Ontario; Winnipeg and Brandon, Manitoba; and Regina and Moose Jaw in Saskatchewan.

Federal Contributions

Contributions by Canada under the Act towards construction costs of the Highway cover two periods:

- (1) the prior construction period, from April 1, 1928, to December 9, 1949.
- (2) the new construction period, from the date on which the province signed the Trans-Canada Highway Agreement, to December 9, 1956, the expiry date of the Act.

The Act provides that where a province has constructed a highway during the prior construction period that properly may be incorporated to advantage as part of the Trans-Canada Highway, the Governor in Council may authorize a Federal contribution not exceeding 50 per cent in respect of the cost to the province of the construction of the highway so incorporated. Actual payment of contributions in respect of prior costs is related under the Agreement to progress on new work.

The Act also provides for payment by Canada to the provinces of amounts not exceeding 50 per cent of construction costs in respect of new work carried out on the Trans-Canada Highway during the new construction period.

While the Act provides for Federal contributions for work done in the prior and new construction periods, no provision was made for contributions for work done in the interim construction period between December 10, 1949, the date on which the Act became effective, and the date on which a province signed the Trans-Canada Highway Agreement. Provision for Federal contributions for interim construction work has therefore been made by special votes of Parliament, and these have been administered under the same conditions as contributions for new construction.

The Trans-Canada Highway Agreement provides that Federal contributions do not vest in Canada any proprietary interest in the Highway, nor shall Canada have any responsibility for its maintenance.

ADMINISTRATION

The Head Office of the Trans-Canada Highway Division of the Development Engineering Branch is located in Ottawa. The Division is represented in the provinces by Supervising Engineers, working in close liaison with provincial government officials. Field Inspecting Engineers working under the Supervising Engineers inspect all work in progress along the Highway to ensure that the terms of the Federal-Provincial Agreement are carried out.

Responsibility for design of the Highway and its construction rests initially with the provincial governments. The Federal Trans-Canada Highway Division co-operates with the provincial government authorities in determining final construction costs. This is necessary in fixing the amount of the Federal contribution.

A list of Federal Supervising Engineers is shown in Appendix C.

SUMMARY

Financial

From December, 1949 to March 31, 1956, funds to a total of \$225,785,574.85 were approved for provincial government commitments on contracts for the construction of the Trans-Canada Highway. In the fiscal year 1955-56 alone \$46,688,991.11 of this was added to previous commitments, with Canada's share to be 50%.

Labour

Provincial reports for the fiscal year show that the project provided 778,180 man days (8 hours) of employment along the route. An estimate of off-site labour created by the supply of materials and services toward the construction of the highway shows that a further 1,322,906 man days (8 hours) were provided across the nation.

Progress

By the end of March, 1956, some 2,038.4 miles of grading and 1,547.7 miles of paving had been approved for construction of which 1,750.6 and 1,319.4 miles, respectively, had been completed.

Of 187 structures approved for construction, 133 had been built.

FEDERAL-PROVINCIAL HIGHWAY CONFERENCE—1955

During the latter part of 1955, it was realized that no province would complete its section of the Trans-Canada Highway by December 9, 1956, the expiry date of the Act. At that time, of the 4,580 mile route of the Highway through the nine participating provinces, approximately 2,850 miles were paved; and 1,525 miles or 35% constructed to Trans-Canada Highway standards. On approximately 1,730 miles, there was no paving whatsoever, and included in this figure were two physical gaps on which there was no highway of any kind. One of these gaps was in the White River area of Ontario and the other in the Gambo area of Newfoundland.

A Federal-Provincial Highway Conference was called for November 14 and 15, 1955, for the purpose of assessing the work remaining to complete a paved road from coast to coast and to discuss the present Trans-Canada Highway Agreement. Ministers of each of the provinces participating under the Agreement together with officials of their respective Departments, attended this Conference.

The Minister of Public Works, the Honourable Robert Winters, as Chairman of this Conference, pointed out that there were a number of miles of highway along the route in each province which were paved prior to December 10, 1949, but not necessarily to Trans-Canada Highway standards. He said it would be unrealistic to expect any provincial government to tear up satisfactory paved highway merely for the purpose of rebuilding it to Trans-Canada Highway standards. He further pointed out that a study of the road in all provinces revealed that in no province was there more than 10% of the route where there was no highway at all. Most provinces already had a continuous road although not all paved, and it was hoped that more emphasis could be placed on a gap closing operation. To this end he invited the delegates to consider a supplementary formula for the federal government's participation. Under the proposed formula the federal government would contribute 90% of the cost of constructing 10% of the total mileage of the Trans-Canada Highway within each province. Other construction would be financed on a 50-50 basis as previously. Contributions for sections of highway constructed prior to December 10, 1949, would only apply in accordance with the present Agreement. Further, the construction period would be extended to December 31, 1960.

Under the chairmanship of Major-General H. A. Young, the officials of each province met during the Federal-Provincial Conference to consider the present Agreements for the purpose of minimizing administration problems in its implementation. As a result of discussions, numerous points in the Agreement were clarified to be considered in a revised Agreement.

A motion to amend the Trans-Canada Highway Act in accordance with decisions reached during the Conference was introduced in Parliament by the Minister of Public Works early in 1956.

Trans-Canada Highway in National Parks

The Trans-Canada Highway Division is responsible for the location, design and construction of the Highway through the National Parks.

Banff National Park

The route west of Banff is located south of the Bow River. Clearing of this location was scheduled for completion during 1956, and with the exception of a 12-mile section east of Lake Louise, the total length of Highway in Banff National Park was under contract for construction. Major contracts amounting to \$7,567,615 were awarded for highway construction and the building of five bridges. Construction progress was satisfactory throughout.

Yoho National Park

Construction contracts in the amount of \$4,005,924 were awarded during the year for 12.6 miles of grading, 4 miles of widening to Trans-Canada standards and the erection of one structure. Progress on all projects was good.

Glacier National Park

In view of the possibility of routing the Trans-Canada Highway through Rogers Pass in Glacier Park, federal engineers investigated the proposed location and set approximately 25 miles of preliminary line from the West Boundary of the Park to Stoney Creek.

Highway Statistics

The following tables are a statistical presentation of progress on the Highway from 10 December, 1949 to 31 March, 1956, and include information pertaining specifically to the fiscal year under review in this report:

Highway Statistics 1956

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage by Provinces at the Time of Signing the Agreement

<i>Participating Provinces</i>	<i>Total Mileage</i>	<i>Approximate* Passable Mileage</i>	<i>Paved* Mileage</i>
Newfoundland.....	610	450	40
Prince Edward Island.....	74	74	30
Nova Scotia.....	310	310	223
New Brunswick.....	388	388	306
Ontario.....	1,412	1,250	456
Manitoba.....	305	305	154
Saskatchewan.....	414	414	139
Alberta.....	292	292	142
British Columbia.....	692	692	427
National Parks.....	83	83	47
Totals.....	4,580	4,258	1,964

*Not necessarily on designated route.

TABLE No. 2—GRADING CONSTRUCTION

1 April, 1955 to 31 March, 1956

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	16.0	40.2
Prince Edward Island.....	4.5	0.3
Nova Scotia.....	30.6	24.2
New Brunswick.....	—	8.1
Ontario.....	70.6	43.5
Manitoba.....	38.3	34.6
Saskatchewan.....	19.0	49.9
Alberta.....	—	17.7
Banff & Yoho Parks.....	35.2	13.0
British Columbia.....	69.4	42.0
Totals.....	283.6	273.5

10 December, 1949 to 31 March, 1956

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	305.3	215.6
Prince Edward Island.....	59.5	55.0
Nova Scotia.....	53.4	32.9
New Brunswick.....	67.9	66.9
Ontario.....	474.0	416.7
Manitoba.....	175.3	152.0
Saskatchewan.....	371.5	367.0
Alberta.....	214.1	214.1
Banff & Yoho Parks.....	61.4	26.0
British Columbia.....	256.0	204.4
Totals.....	2,038.4	1,750.6

TABLE No. 3—BASE COURSE AND PAVING CONSTRUCTION

April 1, 1955 to March 31, 1956

<i>Province</i>	<i>Miles of Contracts Approved</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	—	—
Prince Edward Island.....	9.4	6.3
Nova Scotia.....	20.4	14.8
New Brunswick.....	7.1	7.4
Ontario.....	88.6	35.8
Manitoba.....	43.2	23.4
Saskatchewan.....	51.3	74.9
Alberta.....	30.8	45.2
Banff & Yoho Parks.....	8.8	—
British Columbia.....	59.3	37.6
Totals.....	318.9	245.4

December 10, 1949 to March 31, 1956

<i>Province</i>	<i>Miles of Contracts Approved</i>	<i>Equivalent Mileage Completed</i>
Newfoundland.....	—	—
Prince Edward Island.....	57.6	52.4
Nova Scotia.....	36.1	18.8
New Brunswick.....	67.6	59.6
Ontario.....	426.5	350.6
Manitoba.....	178.9	153.5
Saskatchewan.....	317.7	305.3
Alberta.....	214.1	196.1
Banff & Yoho Parks.....	20.1	5.8
British Columbia.....	229.1	177.3
Totals.....	1,547.7	1,319.4

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) of "On Site" on Trans-Canada Highway

Compiled from Provincial Reports

1 April, 1955 to 31 March, 1956

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	6,463	12,135	73,623	92,221
Prince Edward Island...	3,415	670	8,071	12,156
Nova Scotia.....	14,344	5,651	44,192	64,187
New Brunswick.....	3,843	1,572	21,183	26,598
Ontario.....	31,212	22,434	132,315	185,961
Manitoba.....	7,858	2,813	41,244	51,915
Saskatchewan.....	17,058	16,531	59,310	92,899
Alberta.....	6,202	3,853	23,883	33,938
Banff & Yoho Parks....	24,197	8,414	62,374	94,985
British Columbia.....	15,398	24,801	83,121	123,320
Totals.....	129,990	98,874	549,316	778,180

*Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 1,322,906 for the same period.

10 December, 1949 to 31 March, 1956

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	39,691	59,935	368,163	467,789
Prince Edward Island...	17,406	5,319	54,553	77,278
Nova Scotia.....	20,895	8,187	60,895	89,977
New Brunswick.....	17,919	7,930	92,806	118,655
Ontario.....	196,330	273,401	1,231,876	1,701,607
Manitoba.....	42,105	20,765	186,705	249,575
Saskatchewan.....	109,919	72,255	317,939	500,113
Alberta.....	52,668	23,874	188,106	264,648
Banff & Yoho Parks....	28,312	9,017	85,572	122,901
British Columbia.....	79,470	94,210	438,758	612,438
Totals.....	604,715	574,893	3,025,373	4,204,981

*Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 7,148,467 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS

April 1, 1955 to March 31, 1956

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share</i>
Newfoundland.....	\$ 2,908,380.00	\$1,454,190.00
Prince Edward Island.....	1,425,100.00	712,550.00
Nova Scotia.....	2,640,070.00	1,320,035.00
New Brunswick.....	1,918,700.00	959,350.00
Quebec.....	—	—
Ontario.....	18,514,315.04	9,257,157.52
Manitoba.....	4,695,946.94	2,347,973.47
Saskatchewan.....	3,229,073.72	1,614,536.86
Alberta.....	2,042,865.00	1,021,432.50
British Columbia.....	9,314,540.41	4,657,270.20
Totals.....	\$46,688,991.11	\$23,344,495.55

December 10, 1949 to March 31, 1956

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share</i>
Newfoundland.....	\$ 18,993,411.05	\$ 9,496,705.52
Prince Edward Island.....	5,126,620.24	2,563,310.12
Nova Scotia.....	4,780,615.00	2,390,307.50
New Brunswick.....	9,133,934.14	4,566,967.07
Quebec.....	—	—
Ontario.....	76,146,801.70	38,073,400.85
Manitoba.....	18,466,371.91	9,233,185.96
Saskatchewan.....	21,303,139.85	10,651,569.93
Alberta.....	25,307,306.93	12,653,653.47
British Columbia.....	46,527,374.03	23,263,687.01
Totals.....	\$225,785,574.85	\$112,892,787.43

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
April 1, 1955 to March 31, 1956

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	—	\$ 2,239,544.24	\$ 2,239,544.24
Prince Edward Island.....	\$ 95,732.56	—	432,563.21	528,295.77
Nova Scotia.....	—	—	234,203.63	234,203.63
New Brunswick.....	649,657.28	—	636,018.66	1,285,675.94
Quebec.....	—	—	—	—
Ontario.....	—	—	3,365,958.81	3,365,958.81
Manitoba.....	—	—	1,381,795.52	1,381,795.52
Saskatchewan.....	—	—	2,001,083.94	2,001,083.94
Alberta.....	—	—	1,626,626.04	1,626,626.04
British Columbia.....	—	—	3,437,370.22	3,437,370.22
Totals.....	\$745,389.84	—	\$15,355,164.27	\$16,100,554.11

December 10, 1949 to March 31, 1956

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 7,561,831.61	\$ 7,718,276.84
Prince Edward Island.....	\$ 95,732.56	—	1,530,178.31	1,625,910.87
Nova Scotia.....	—	—	309,903.60	309,903.60
New Brunswick.....	934,026.34	193,576.71	2,711,632.82	3,839,235.87
Quebec.....	—	—	—	—
Ontario.....	1,569,640.35	337,172.88	22,097,081.12	24,003,894.35
Manitoba.....	506,354.45	17,958.54	6,512,122.22	7,036,435.21
Saskatchewan.....	—	3,103.38	9,049,771.50	9,052,874.88
Alberta.....	—	14,975.87	10,014,233.55	10,029,209.42
British Columbia.....	1,170,277.71	838,437.55	15,938,149.08	17,946,864.34
Totals.....	\$4,276,031.41	\$1,561,670.16	\$75,724,903.81	\$81,562,605.38

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in the Schedule "A" of each Provincial Agreement may be described generally as follows—

NEWFOUNDLAND—From St. John's across the Avalon Peninsula by way of Holyrood north to Clarenville and Gander and thence via Bishop's Falls and Grand Falls to Corner Brook. From Corner Brook the route proceeds southward to the Port aux Basques ferry terminus.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry, the terminal of the Prince Edward Island-Nova Scotia ferry, thence through Millview, to east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through the villages of Cornwall, Bonshaw and Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—Commencing at North Sydney, thence to Baddeck, and Port Hastings, crossing the Strait of Canso via the new causeway and thence generally via route No. 4 to Antigonish, New Glasgow, West River, Truro, Oxford, Springhill and Amherst to the Nova Scotia-New Brunswick boundary. Connections are also to be provided to the Newfoundland ferry terminal at North Sydney, and from West River to the Prince Edward Island ferry terminal at Pictou.

NEW BRUNSWICK—Commencing at the Nova Scotia boundary near Aulac, a branch of the highway will extend to Cape Tormentine to provide a connecting link with the ferry to Prince Edward Island. From Aulac, the Highway will run through Sackville to Moncton, Sussex and Jemseg to Fredericton. From Fredericton, the route will proceed via Woodstock, Grand Falls and Edmundston to the New Brunswick-Quebec interprovincial boundary.

ONTARIO—The general route is described as proceeding from Hawkesbury near the eastern boundary of Ontario, via Ottawa, Carleton Place, Perth, Peterborough, Lindsay, Orillia, Parry Sound, Sudbury, Thessalon, Chappleau, Schreiber, Nipigon, Port Arthur, Ignace, Dryden and Kenora to the intersection of Provincial Highway No. 17 with the Manitoba boundary.

MANITOBA—From the eastern interprovincial boundary the route leads westerly to St. Boniface and Winnipeg, thence via Portage la Prairie and Carberry to the city of Brandon, thence from the west boundary of Brandon via Virden and Elkhorn, to the intersection of Saskatchewan Highway No. 1 with the Manitoba-Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary the route follows generally Highway No. 1 through or near Moosomin, Wapella, Whitewood, Broadview, Wolseley, Sintaluta and Indian Head, to reach Regina. West of Regina the route goes via Belle Plaine to Moose Jaw and on to Swift Current continuing to the interprovincial boundary one mile east of Walsh, Alberta.

ALBERTA—Commencing at the Saskatchewan boundary the route designated by the Province of Alberta is generally the route of the present Alberta Highway No. 1 touching Walsh, Medicine Hat, Brooks, Bassano, Gleichen and Strathmore on the way to Calgary. From Calgary the route goes to Cochrane and Canmore, thence to the intersection of the Alberta-National Park boundary at the Banff National Park East Gate.

NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 83-mile route through Banff and Yoho National Parks. This route leaving the east entrance of Banff National Park, follows the Bow River Valley westerly to Banff and enters Yoho National Park, B.C., at the Great Divide. From the latter point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C.

BRITISH COLUMBIA—From the west boundary of Yoho National Park the Trans-Canada Highway route will follow British Columbia Highway No. 1 around the Big Bend of the Columbia River from Golden to Revelstoke, and thence westward through Malakwa, Sicamous, Salmon Arm and Kamloops following the South Thompson River to Lytton and then the Fraser River Canyon and Valley route to New Westminster and Vancouver. Again, commencing in the city of Nanaimo on Vancouver Island, the route proceeds southward along British Columbia Highway No. 1, to reach the city of Victoria, the western terminus of the Trans-Canada Highway.

In all of the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distances successively between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT OF WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB BASE ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL SUPERVISING ENGINEERS
DEVELOPMENT ENGINEERING BRANCH, TRANS-CANADA
HIGHWAY DIVISION

NEWFOUNDLAND

A. H. MacKinnon,
P.O. Box E5368,
St. John's, Nfld.
Phone 7726

NOVA SCOTIA

H. F. Peters,
5th Floor Federal Building,
Halifax, N.S.
Phone: 2-5865

NEW BRUNSWICK AND P.E.I.

J. S. Harris,
461 King Street,
Fredericton, N.B.
Phone: 9141

and

142½ Great George St.,
Charlottetown, P.E.I.
Phone: 3943

ONTARIO

W. Koropatnick,
385 Yonge Street,
Toronto 1, Ontario.
Phone: EM.2-2711

MANITOBA

J. A. Flatt,
705-169 Notre Dame Ave. E.,
Winnipeg 1, Man.
Phone: 74-7170

SASKATCHEWAN

J. E. Savage,
325 New Federal Bldg.,
Regina, Sask.
Phone: LA. 3-2331

ALBERTA

J. G. Linton,
10018-105th St.,
Edmonton, Alta.
Phone: 2-5744

BRITISH COLUMBIA

R. F. Petursson,
614 Elliott Street,
Victoria, B.C.
Phone: 2-5434

BANFF & YOHO NATIONAL PARKS

J. G. Linton,
Federal Bldg.,
Banff, Alta.
Phone: 3321

EDMOND CLOUTIER, C.M.G., O.A., D.S.P.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1957

A1 PW 41

A55

Canada, Public Works Department



CANADA



Annual

REPORT of
PROCEEDINGS
UNDER THE
TRANS-CANADA
HIGHWAY ACT

For the Fiscal Year ended
MARCH 31
1957

DEPARTMENT OF PUBLIC WORKS



MOUNT EISENHOWER AND FAST FLOWING BOW RIVER MAKE PICTURESQUE BACKGROUND FOR NEWLY COMPLETED SECTION OF

— PHOTO BY BRUNO ENGLER

TRANS-CANADA HIGHWAY IN BANFF NATIONAL PARK, ALBERTA.

DEPARTMENT OF PUBLIC WORKS
Trans-Canada Highway Division

ANNUAL REPORT
Proceedings Under
THE TRANS-CANADA HIGHWAY ACT
Fiscal Year Ended
MARCH 31, 1957



Issued under the Authority of the
HONOURABLE HOWARD C. GREEN
Minister of Public Works
OTTAWA

To His Excellency the Right Honourable
VINCENT MASSEY, C.H., Governor General and
Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1957.

Respectfully submitted,

HOWARD C. GREEN,
Minister of Public Works

The Honourable HOWARD C. GREEN,
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the eighth Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1957.

Your obedient servant,

H. A. YOUNG,
Deputy Minister

CONTENTS

	PAGE
TRANS-CANADA HIGHWAY ACT.....	1
GENERAL REVIEW OF 1956.....	2
ADMINISTRATION.....	2
SUMMARY.....	2
Financial.....	2
Labour.....	3
Progress.....	3
TRANS-CANADA HIGHWAY IN NATIONAL PARKS.....	3
HIGHWAY STATISTICS.....	3
Table 1—Mileage, etc.....	4
Table 2—Grading Construction.....	4
Table 3—Paving Construction.....	5
Table 4—Labour Report.....	6
Table 5—Summary of Contractual Commitments.....	7
Table 5(a)—Summary of Commitments for Additional 40%.....	8
Table 6—Summary of Payments to Provincial Governments.....	9
Table 6(a)—Payments by Canada re Additional 40%.....	10
APPENDICES	
A—Schedule A—Route of Highway.....	11
B—Schedule B—General Specifications.....	14
C—Federal Supervising Engineers.....	16

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1957
THE TRANS-CANADA HIGHWAY ACT

The Trans-Canada Highway Act 1949 (2nd Sess.), c 40, s.1, became effective on December 10, 1949. Under this Act, Agreements covering Canada's participation in the cost of construction of a Trans-Canada Highway were entered into with all provinces except Quebec. The Act, with the Agreements, provided for Canada's contribution to the extent of 50 per cent of the cost of new construction and up to 50 per cent of the cost of the construction of sections of Highway built prior to the passing of the Act, where these sections are properly incorporated in the Trans-Canada Highway. Canada's total contribution under the Act was limited to \$150,000,000.

The Agreements, authorized by the 1949 Act, were executed with the Provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta on April 24, 1950, with the Province of New Brunswick on May 27, 1950, the Province of Newfoundland on June 23, 1950 and with the Province of Nova Scotia on May 15, 1952.

In the early stages of the project, the Provinces generally experienced many problems in connection with the enlarged construction program. Work began slowly in 1950 and by March 31, 1951 only 447 miles of the Highway were completed to the grading stage, with 109 miles paved. Construction continued at a high standard but most provinces found it difficult to provide, in their yearly programs, for the work necessary to ensure the completion of the Highway within the seven-year period covered by the Act of 1949. The uncompleted mileage was the subject of discussion at a Federal-Provincial Highway Conference in November, 1955, and, in accordance with decisions reached during that Conference, a motion to amend the Trans-Canada Highway Act was introduced in Parliament by the Minister of Public Works early in 1956. The enactment of this amendment by Parliament increased the extent of Canada's contribution to the cost of the Highway by providing for an additional forty percent contribution to the cost of construction on one-tenth of the Highway mileage in each Province. The construction period was extended to the 31st day of December, 1960, and the aggregate limit of the funds available for expenditure by Canada was increased to \$250,000,000.

The amendment of the Trans-Canada Highway Act resulted in the execution of a new Agreement with each of the participating Provinces. This Agreement was signed by the Provinces of New Brunswick, Manitoba and Saskatchewan on the 8th of June, 1956, by the Province of Alberta on the 22nd of June, 1956, the Province of Prince Edward Island on the 25th of June, 1956, the Province of Ontario on the 27th of July, 1956, the

Province of Nova Scotia on the 4th of September, 1956, the Province of Newfoundland on the 19th of November, 1956, and the Province of British Columbia on the 6th of December, 1956.

The Agreement provides that by the 31st day of December, 1960, the Highway shall be completed in conformity with the general specifications set out in Schedule "B", or that it shall constitute a good standard of paved highway. The provision eliminates the necessity of a Province reconstructing sections of the Highway which are now paved to a satisfactory provincial standard and makes it possible to speed up the work on those sections where reconstruction and paving is most essential.

Schedule "A" of the Agreement with each province designates the route of the Highway within the Province. General specifications covering the construction are contained in Schedule "B". These schedules are covered in this Report in Appendices "A" and "B".

GENERAL REVIEW OF 1956

Progress during the 1956 construction season was generally satisfactory and it now appears that the sections of the Highway through the Province of Prince Edward Island, Saskatchewan and Alberta may be completely constructed within the next year. Grading contracts were awarded on a total of 402 miles of which 364 miles were completed to the required standard. Paving contracts covered 346 miles of which 311 miles were completed.

ADMINISTRATION

Responsibility for design of the Highway and its construction rests initially with the provincial governments. Plans, specifications and contract documents are subject to revision and approval. The Trans-Canada Highway Division of the Development Engineering Branch of the Department of Public Works co-operates with the provincial government authorities in determining the final construction costs of the Highway and its engineers ensure that the terms of the Agreement are carried out. Inspections are made, in co-operation with provincial engineers, during all phases of construction.

The Head Office of the Trans-Canada Highway Division is located in Ottawa. The Division is represented in the provinces by Supervising Engineers who are assisted by Inspecting Engineers with offices strategically located along the route of the Highway. The Supervising Engineers are as shown in Appendix "C".

SUMMARY

Financial:

From December, 1949 to March 31, 1957, funds to a total of \$307,790,307.88 were approved for provincial government commitments on contracts for the construction of the Trans-Canada Highway. Commitments during the fiscal year 1956-57 totalled \$82,004,733.03. The increase in commitments over those for the previous fiscal year was \$35,315,741.92. Canada's share of the 1956-57 commitments totalled \$52,282,713.91, of which \$11,280,347.40 represents payments on account of the additional 40 percent contribution to be made to the cost of construction on 10 percent of the Highway mileage. Payments to the provinces during the 1956-57 fiscal year totalled \$24,805,962.96.

Labour:

Provincial reports show that Trans-Canada Highway Projects provided 991,626 man days (8 hours) of employment during the fiscal year. Off-site labour created by the supply of materials and services is estimated at an additional 1,685,762 man days (8 hours).

Progress:

The mileage of the Highway approved for grading by the end of March, 1957, totalled 2,456 of which 2,117 miles had been constructed to the required standard. The mileage approved for paving totalled 1,658 of which 1,542 miles were completed.

Of the 249 structures approved for construction 184 were completed prior to March 31, 1957.

Trans-Canada Highway in National Parks

The Trans-Canada Highway Division is alone responsible for the location, design and construction of the Highway through the National Parks.

Banff National Park:

All of the Highway in Banff National Park was under varying stages of construction during the year. In all, contracts amounting to \$5,433,835.00 were awarded for construction work, including three bridges and fourteen miles of bituminous stabilized base course. Satisfactory progress was reported on all projects.

Yoho National Park:

Contracts amounting to \$1,919,748.00 were awarded during the year for six miles of highway construction and the erection of two bridges. Good progress was made on all work.

Glacier National Park:

Surveys and soil investigations carried out last year established the feasibility of the route through Rogers Pass. A firm location was laid down in the western portion of the Park and a contract was awarded for clearing and grubbing ten miles in this section at a cost of \$450,000. Clearing work was scheduled to get under way early in 1957.

Mount Revelstoke National Park:

In view of the Trans-Canada Highway having been routed through Rogers Pass and Glacier National Park an additional eight miles now lies within the boundaries of Mount Revelstoke National Park. Route surveys on this section were carried out for the Division by the Highway Department of the Province of British Columbia.

Highway Statistics

The following tables furnish a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1957, and include information pertaining specifically to the fiscal year under review in this report:

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage Under New Agreement

<i>Provinces</i>	<i>Total Mileage</i>	<i>*Approximate Passable Mileage</i>	<i>†Paved Mileage</i>
Newfoundland.....	580	529	67
Prince Edward Island.....	71	71	70
Nova Scotia.....	311	311	197
New Brunswick.....	390	390	301
Ontario.....	1,436	1,301	537
Manitoba.....	309	309	213
Saskatchewan.....	406	406	372
Alberta.....	282	282	214
British Columbia.....	568	568	302
National Parks.....	117	83	48
Totals.....	4,470	4,250	2,321

*Excluding physical gaps of 51 miles in Newfoundland between Clarenville and Alexander Bay and 164 miles in Ontario between Agawa and Marathon along the north shore of Lake Superior.

†Including mileages paved to provincial standard.

TABLE No. 2—GRADING CONSTRUCTION

1 April, 1956 to 31 March, 1957

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	22	25
Prince Edward Island.....	9	12
Nova Scotia.....	23	32
New Brunswick.....	25	19
Ontario.....	91	48
Manitoba.....	30	34
Saskatchewan.....	35	33
Alberta.....	57	26
Banff and Yoho Parks.....	19	25
British Columbia.....	91	110
Totals.....	402	364

TABLE No. 2—GRADING CONSTRUCTION—*Concluded*

10 December, 1949 to 31 March, 1957

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	327	240
Prince Edward Island.....	68	67
Nova Scotia.....	76	65
New Brunswick.....	93	85
Ontario.....	565	464
Manitoba.....	205	186
Saskatchewan.....	406	405
Alberta.....	271	240
Banff and Yoho Parks.....	80	51
British Columbia.....	365	314
Totals.....	2,456	2,117

TABLE No. 3—PAVING CONSTRUCTION

1 April, 1956 to 31 March, 1957

<i>Province</i>	<i>Miles of Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	—	—
Prince Edward Island.....	10	14
Nova Scotia.....	2	—
New Brunswick.....	7	15
Ontario.....	103	73
Manitoba.....	43	68
Saskatchewan.....	84	63
Alberta.....	—	18
National Parks.....	—	—
British Columbia.....	97	60
Totals.....	346	311

TABLE No. 3—PAVING CONSTRUCTION—*Concluded*

10 December, 1949 to 31 March, 1957

<i>Province</i>	<i>Miles of Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	—	—
Prince Edward Island.....	67	66
Nova Scotia.....	2	—
New Brunswick.....	74	74
Ontario.....	418	390
Manitoba.....	222	213
Saskatchewan.....	401	356
Alberta.....	214	214
National Parks.....	—	—
British Columbia.....	260	229
Totals.....	1,658	1,542

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) "On Site" Work on Trans-Canada Highway

Compiled from Provincial Reports

1 April, 1956 to 31 March, 1957

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	3,364	5,883	34,605	43,852
Prince Edward Island...	5,478	1,504	32,292	39,274
Nova Scotia.....	6,925	3,104	23,538	33,567
New Brunswick.....	8,073	4,683	51,910	64,666
Ontario.....	48,570	54,544	245,953	349,067
Manitoba.....	3,679	3,575	51,511	58,765
Saskatchewan.....	24,493	16,963	65,293	106,749
Alberta.....	9,154	4,727	43,563	57,444
Banff and Yoho Parks..	10,726	5,292	32,866	48,884
British Columbia.....	20,883	30,136	138,339	189,358
Totals.....	141,354	130,411	719,870	991,626

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 1,685,762 for the same period.

TABLE No. 4—LABOUR REPORT—*Concluded*

10 December, 1949 to 31 March, 1957

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	43,055	65,818	402,768	511,641
Prince Edward Island...	22,884	6,823	86,845	116,552
Nova Scotia.....	27,820	11,291	84,433	123,544
New Brunswick.....	25,992	12,613	144,716	183,321
Ontario.....	244,900	327,945	1,477,829	2,050,674
Manitoba.....	45,784	24,340	238,216	308,340
Saskatchewan.....	134,412	89,218	383,232	606,862
Alberta.....	61,822	28,601	231,669	322,092
Banff and Yoho Parks..	39,038	14,309	118,438	171,785
British Columbia.....	100,353	124,346	577,097	801,796
Totals.....	746,060	705,304	3,745,243	5,196,607

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 8,834,232 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS

1 April, 1956 to 31 March, 1957

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 3,226,920.00	\$1,613,460.00
Prince Edward Island.....	1,355,900.00	962,150.00
Nova Scotia.....	2,753,155.00	1,376,577.50
New Brunswick.....	6,617,236.35	4,545,818.17
Ontario.....	22,930,460.29	15,978,140.14
Manitoba.....	4,938,788.64	2,469,394.32
Saskatchewan.....	7,563,909.00	5,746,974.50
Alberta.....	6,909,263.75	5,074,922.27
British Columbia.....	25,709,100.00	14,276,707.00
Totals.....	\$82,004,733.03	\$52,044,143.90

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS—*Concluded*
10 December, 1949 to 31 March, 1957

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$22,220,331.05	\$11,110,165.52
Prince Edward Island.....	6,482,520.24	3,525,460.12
Nova Scotia.....	7,533,770.00	3,766,885.00
New Brunswick.....	15,751,170.49	9,112,785.24
Ontario.....	99,077,261.99	54,051,540.99
Manitoba.....	23,405,160.55	11,702,580.28
Saskatchewan.....	28,867,048.85	16,398,544.43
Alberta.....	32,216,570.68	17,728,575.74
British Columbia.....	72,236,474.03	37,540,394.01
Totals.....	\$307,790,307.88	\$164,936,931.33

TABLE 5 (a)

Summary of Canada's Commitments for Additional 40 Percent Contributions from
1 April, 1956 to 31 March, 1957 (Included in Table No. 5).

Newfoundland.....	\$ —
Prince Edward Island.....	284,200.00
Nova Scotia.....	—
New Brunswick.....	1,237,200.00
Ontario.....	4,512,910.00
Manitoba.....	—
Saskatchewan.....	1,965,020.00
Alberta.....	1,620,290.40
British Columbia.....	1,422,157.00
Totals.....	\$11,041,777.40

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS

1 April, 1956 to 31 March, 1957

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	\$ —	\$ —	\$ 1,126,469.58	\$ 1,126,469.58
Prince Edward Island.....	—	—	414,104.91	414,104.91
Nova Scotia.....	—	—	951,212.88	951,212.88
New Brunswick.....	501,579.96	—	2,780,289.88	3,281,869.84
Ontario.....	—	—	4,855,053.08	4,855,053.08
Manitoba.....	477,457.63	—	2,646,847.60	3,124,305.23
Saskatchewan.....	90,087.91	—	2,562,383.99	2,652,471.90
Alberta.....	—	—	1,945,462.47	1,945,462.47
British Columbia.....	637,085.86	—	5,817,927.21	6,455,013.07
Totals.....	\$1,706,211.36	—	\$23,099,751.60	\$24,805,962.96

10 December, 1949 to 31 March, 1957

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 8,688,301.19	\$ 8,844,746.42
Prince Edward Island.....	95,732.56	—	1,944,283.22	2,040,015.78
Nova Scotia.....	—	—	1,261,116.48	1,261,116.48
New Brunswick.....	1,435,606.30	193,576.71	5,491,922.70	7,121,105.71
Ontario.....	1,569,640.35	337,172.88	26,952,134.20	28,858,947.43
Manitoba.....	983,812.08	17,958.54	9,158,969.82	10,160,740.44
Saskatchewan.....	90,087.91	3,103.38	11,612,155.49	11,705,346.78
Alberta.....	—	14,975.87	11,959,696.02	11,974,671.89
British Columbia.....	1,807,363.57	838,437.55	21,756,076.29	24,401,877.41
Totals.....	\$5,982,242.77	\$1,561,670.16	\$98,824,655.41	\$106,368,568.34

TABLE 6 (a)

Payments by Canada on Account of Additional 40% Contributions from
1 April, 1956 to 31 March, 1957 (Included in Table No. 6)

Newfoundland.....	\$	—
Prince Edward Island.....		—
Nova Scotia.....		—
New Brunswick.....		723,267.85
Ontario.....		36,670.56
Manitoba.....		—
Saskatchewan.....		—
Alberta.....		295,978.99
British Columbia.....		59,400.56
Totals.....	\$	<u>1,115,317.96</u>

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in the Schedule "A" of each Provincial Agreement may be described as follows:

NEWFOUNDLAND—From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarenville, Port Blandford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry, the terminal of the Prince Edward Island—Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—From the New Brunswick—Nova Scotia border to Oxford, thence via Route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycocomagh, Baddeck and Little Bras d'Or to the Newfoundland Ferry Terminal at North Sydney.

NEW BRUNSWICK—From the intersection of provincial highway No. 2 and the Nova Scotia—New Brunswick boundary westerly to Aulac, thence easterly via provincial highway No. 16 to Cape Tormentine to provide a connecting link with the Ferry to Prince Edward Island, again, from Aulac via provincial highway No. 2, Sackville, Dorchester, Upper Dorchester, College Bridge and Memramcook to bypass Moncton on the North and return to provincial highway No. 2 near River Glade to Anagance, Penobsquis, and a diversion of the town of Sussex to the junction of highways No. 2 and No. 9; thence along provincial highway No. 9 via Coles Island, Young's Cove, Jemseg, Sheffield and Maugerville to a crossing of the Saint John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2 about two miles west of Fredericton; thence via Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, Meductic, and Woodstock to the junction of provincial highways No. 2 and No. 2B; thence on No. 2B to junction of No. 2 and No. 2B one mile south of Hartland, thence on No. 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent,

Kilburn, Perth, Andover, Aroostook, Grand Falls, St. Leonard, Green River, St. Basile, Edmunston, St. Jacques to the intersection of provincial Highway No 2 with the Quebec boundary.

ONTARIO—Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway No. 7 to Lindsay; from there via highway No. 12 to Orillia and Waubesa; then northerly on a new location to MacTier on highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schrieber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

MANITOBA—From the Ontario boundary to north of East Braintree, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with highway No. 1 west in the vicinity of St. Charles; thence west via Headingly, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and southwesterly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and southwesterly along the Canadian Pacific Railway line to three miles west of Oak Lake; thence northwesterly and paralleling the railway to the Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sintaluta, Indian Head, McLean, Balignie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh.

ALBERTA—From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, thence northwesterly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River south of Shouldice Bridge, and thence south of the Bow River to a crossing of the River

two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park, follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C. Further west in Glacier National Park the route of the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

BRITISH COLUMBIA—From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on Highway No. 1, thence south of Chilliwack to the Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the north boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT-OF WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration—deceleration lanes are approved, and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB-BASE, ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL SUPERVISING ENGINEERS
DEVELOPMENT ENGINEERING BRANCH—TRANS-CANADA
HIGHWAY DIVISION

NEWFOUNDLAND

A. H. MacKinnon,
P.O. Box E-5368,
201-2-3 Marshall Bldg.,
St. John's, Nfld.
Phone: 7726

NOVA SCOTIA

H. F. Peters,
5th Floor, Federal Bldg.,
Halifax, N.S.
Phone: 2-5865

NEW BRUNSWICK AND P.E.I.

G. D. Reid,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: 9141

—and—

G. D. Reid,
Box 1298, Confederation Bldg.,
Charlottetown, P.E.I.
Phone: 3943

ONTARIO

W. Koropatnick,
385 Yonge Street,
Toronto 1, Ont.
Phone: EM 2-2711

MANITOBA

J. A. Flatt,
705-169 Notre Dame Ave., E.,
Winnipeg 1, Man.
Phone: 74-7170

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.
Regina, Sask.
Phone: LA 3-2331

ALBERTA

J. E. Savage,
10018-105th St.,
Edmonton, Alta.
Phone: 2-5744

BRITISH COLUMBIA

R. F. Petursson,
614 Elliott Street,
Victoria, B.C.
Phone: 2-5434

WESTERN NATIONAL PARKS

J. G. Linton,
Federal Bldg.,
Banff, Alta.
Phone: 3321

EDMOND CLOUTIER, C.M.G., O.A., D.S.P.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1957

1 PW 41

A55



CANADA



REPORT of
PROCEEDINGS
UNDER THE
TRANS-CANADA
HIGHWAY ACT

For the Fiscal Year ended
MARCH 31
1958

DEPARTMENT OF PUBLIC WORKS



A VIEW OF THE TRANS-CANADA HIGHWAY 25 MILES WEST OF FORT WILLIAM, ONTARIO, SHOWING A SECTION CUT THROUGH HEAVY ROCK.

CH1 PW 4
455
DEPARTMENT OF PUBLIC WORKS
Highways Division

ANNUAL REPORT
Proceedings Under
THE TRANS-CANADA HIGHWAY ACT
Fiscal Year Ended
MARCH 31, 1958



Issued Under the Authority of the
HONOURABLE HOWARD C. GREEN
Minister of Public Works
OTTAWA

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1959

Price 25 cents Cat. No. W 41-58

To His Excellency the Right Honourable
VINCENT MASSEY, C.H., Governor General and
Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada (1952), for the fiscal year ended March 31st, 1958.

Respectfully submitted,

HOWARD C. GREEN,

Minister of Public Works

The Honourable HOWARD C. GREEN,
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the ninth Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada (1952), for the fiscal year ended March 31st, 1958.

Your obedient servant,

H. A. YOUNG,
Deputy Minister

CONTENTS

	PAGE
TRANS-CANADA HIGHWAY ACT.....	1
GENERAL REVIEW OF 1957.....	1
ADMINISTRATION.....	2
SUMMARY.....	2
Financial.....	2
Labour.....	2
Progress.....	2
TRANS-CANADA HIGHWAY IN NATIONAL PARKS.....	2
HIGHWAY STATISTICS.....	3
Table 1—Mileage, etc.....	4
Table 2—Grading Construction.....	4
Table 3—Paving Construction.....	5
Table 4—Labour Report.....	6
Table 5—Summary of Contractual Commitments.....	7
Table 5(a)—Summary of Commitments for Additional 40%.....	8
Table 6—Summary of Payments to Provincial Governments.....	9
Table 6(a)—Payments by Canada re Additional 40%.....	10
APPENDICES	
A—Schedule A—Route of Highway.....	11
B—Schedule B—General Specifications.....	14
C—Federal Supervising Engineers.....	16

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1958

THE TRANS-CANADA HIGHWAY ACT

The Trans-Canada Highway Act 1949, c (40), s.1, as amended by Parliament in 1956, resulted in the execution of a new Agreement with each of the participating Provinces. This Agreement was signed by the Provinces of New Brunswick, Manitoba and Saskatchewan on the 8th of June, 1956, by the Province of Alberta on the 22nd of June, 1956, the Province of Prince Edward Island on the 25th of June, 1956, the Province of Ontario on the 27th of July, 1956, the Province of Nova Scotia on the 4th of September, 1956, the Province of Newfoundland on the 19th of November, 1956, and the Province of British Columbia on the 6th of December, 1956.

The enactment of the 1956 Amendment increased the extent of Canada's contribution to the cost of the Highway by providing for an additional forty per cent contribution to the cost of construction on one-tenth of the Highway mileage in each Province. The construction period was extended to the 31st day of December, 1960, and the aggregate limit of the funds available for expenditure by Canada was increased to \$250,000,000.

The Agreement provides that by the 31st day of December, 1960, the Highway shall be completed in conformity with the general specifications set out in Schedule "B", or that it shall constitute a good standard of paved highway. This provision eliminates the necessity of a Province reconstructing sections of the Highway which are now paved to a satisfactory provincial standard and has made it possible to speed up the work on those sections where reconstruction and paving is most essential.

Schedule "A" of the Agreement with each Province designates the route of the Highway within the Province. General specifications covering the standard of construction are contained in Schedule "B". These schedules are covered in this Report in Appendices "A" and "B".

GENERAL REVIEW of 1957

Progress during the 1957 construction season was generally satisfactory and the construction of the Saskatchewan section of the Highway has been completed. Present indications are that, with the possible exception of the Province of Newfoundland, each of the participating Provinces will complete the construction of its section of the Highway before the 31st of December, 1960.

ADMINISTRATION

Responsibility for design of the Highway and its construction rests initially with the provincial governments. Plans, specifications and contract documents are subject to revision and approval. The Highways Division of the Development Engineering Branch of the Department of Public Works co-operates with the provincial government authorities in determining the final construction costs of the Highway and its engineers ensure that the terms of the Agreement are carried out. Inspections are made, in co-operation with provincial engineers, during all phases of construction.

The Head Office of the Highways Division is located in Ottawa. The Division is represented in the provinces by Supervising Engineers who are assisted by Inspecting Engineers with offices strategically located along the route of the Highway. The Supervising Engineers are as shown in Appendix "C".

SUMMARY

Financial

From December, 1949, to March 31, 1958, funds to a total of \$381,062,368.05 were approved for provincial government commitments on contracts for the construction of the Trans-Canada Highway. Commitments during the fiscal year 1957-58 totalled \$73,272,060.17. Canada's share of the 1957-58 commitments totalled \$52,103,817.27, of which \$15,417,787.16 represents payments on account of the additional 40 per cent contribution to be made to the cost of construction on 10 per cent of the Highway mileage. Payments to the provinces during the 1957-58 fiscal years totalled \$49,348,049.42. The increase in payments made to the provinces in 1957-58 almost equalled the amount of the 1956-57 total of \$24,805,962.96.

Labour

Provincial reports show that Trans-Canada Highway projects provided 1,497,628 man days (8 hours) of employment during the fiscal year. Off-site labour created by the supply of materials and services is estimated at an additional 2,545,968 man days (8 hours).

Progress

The mileage of the Highway approved for grading by the end of March, 1958, totalled 2,779 of which 2,489 miles have been constructed to the required standard. The mileage approved for paving totalled 1,764 of which 1,707 miles were completed.

Of the 319 structures approved for construction 236 were completed prior to March 31, 1958.

TRANS-CANADA HIGHWAY IN NATIONAL PARKS

The Highways Division of the Development Engineering Branch is alone responsible for the location, design and construction of the Highway through National Parks, a total distance of 142.9 miles through five Parks.

Terra Nova National Park:

The Park was proclaimed in April, 1957, which led to the assumption by the Department of responsibility for building the 26.2 miles of Highway lying within its boundaries. In May, the Federal Government took over two grading contracts totalling 15.3 miles in length which had been awarded by the Provincial Government, arranged to reimburse Newfoundland for pre-engineering costs and the cost of clearing a 14.5-mile section of the Highway which had been completed prior to the proclamation of the Park, and approved the award of a further clearing contract which would complete clearing and grubbing of the total mileage within the Park. In September, a grading contract was awarded for the remaining eleven-mile section which brought the total value of the contracts assumed and awarded during the year to \$4,087,710.00.

Banff National Park:

Contracts totalling \$813,323.80 were awarded during the year for the erection of two bridges and for laying fifteen miles of bituminous stabilized base course. By the end of the year grading had been completed except for approximately three-fifths of a mile at the western end of the Park, a three-inch bituminous stabilized base course had been laid for the first thirty miles from the East Gate, contracts for the erection of thirteen of the sixteen major bridges and railway overpasses had been completed, and construction on two of the remaining three was well under way.

Yoho National Park:

Contracts amounting to a total of \$1,050,685.60 were awarded during the year for the erection of one bridge and two railway overpasses and for the laying of twelve miles of bituminous stabilized base course from the West Gate of the Park easterly. By the end of 1957 all but three-tenths of a mile of grading and gravel base course had been completed, a three-inch bituminous stabilized base course had been placed over a sixteen-mile section measured from the West Gate, four of the seven major bridges and overpasses were completed, and construction of the remaining three was well under way.

Glacier National Park:

A further clearing contract amounting to \$663,350.00 was awarded. By the end of the year twenty-one miles of the total of twenty-nine miles of the Highway through the park had been cleared.

Revelstoke National Park:

Location of the Highway through Mount Revelstoke Park was completed early in the year by the Highways Department of the Province of British Columbia. A contract amounting to \$385,500.00 was awarded in September for clearing a seven and one-half-mile Section. The remaining one-half mile which lies adjacent to the City of Revelstoke is being cleared by the Highways Department of the Province of British Columbia.

HIGHWAY STATISTICS

The following tables furnish a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1958, and include information pertaining specifically to the fiscal year under review in this report:

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage Under New Agreement

<i>Provinces</i>	<i>Total Mileage</i>	<i>*Approximate Passable Mileage</i>	<i>†Paved Mileage</i>
Newfoundland.....	554	549	67
Prince Edward Island.....	71	71	70
Nova Scotia.....	311	311	202
New Brunswick.....	390	390	346
Ontario.....	1,436	1,272	972
Manitoba.....	309	309	277
Saskatchewan.....	406	406	406
Alberta.....	282	282	216
British Columbia.....	568	568	407
National Parks.....	143	80	20
Totals.....	4,470	4,238	2,983

*Excluding physical gaps of 5 miles in Newfoundland northerly from Port Blandford, 164 miles in Ontario between Agawa and Marathon along the north shore of Lake Superior and 63 miles in the National Parks (Terra Nova Park, Newfoundland—26 miles, Glacier and Revelstoke Parks, British Columbia—37 miles.)

†Including mileages paved to provincial standard.

TABLE No. 2—GRADING CONSTRUCTION

1 April, 1957 to 31 March, 1958

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	35	7
Prince Edward Island.....	3	3
Nova Scotia.....	22	29
New Brunswick.....	27	33
Ontario.....	108	109
Manitoba.....	35	48
Saskatchewan.....	—	1
Alberta.....	4	35
British Columbia.....	63	70
Terra Nova Park.....	26	8
Banff and Yoho Parks.....	—	29
Glacier and Revelstoke Parks.....	—	—
Totals.....	323	372

TABLE No. 2—GRADING CONSTRUCTION—*Concluded*

10 December, 1949 to 31 March, 1958

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	362	247
Prince Edward Island.....	71	70
Nova Scotia.....	98	94
New Brunswick.....	120	118
Ontario.....	673	573
Manitoba.....	240	234
Saskatchewan.....	406	406
Alberta.....	275	275
British Columbia.....	428	384
Terra Nova Park.....	26	8
Banff and Yoho Parks.....	80	80
Glacier and Revelstoke Parks.....	—	—
Totals.....	2,779	2,489

TABLE No. 3—PAVING CONSTRUCTION

1 April, 1957 to 31 March, 1958

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	—	—
Prince Edward Island.....	3	1
Nova Scotia.....	—	—
New Brunswick.....	14	4
Ontario.....	34	44
Manitoba.....	48	33
Saskatchewan.....	5	50
Alberta.....	—	—
British Columbia.....	2	33
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	—
Totals.....	106	165

TABLE No. 3—PAVING CONSTRUCTION—*Concluded*
10 December, 1949 to 31 March, 1958

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	—	—
Prince Edward Island.....	70	67
Nova Scotia.....	2	—
New Brunswick.....	88	78
Ontario.....	452	434
Manitoba.....	270	246
Saskatchewan.....	406	406
Alberta.....	214	214
British Columbia.....	262	262
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	—
Totals.....	1,764	1,707

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) "On Site" Work on Trans-Canada Highway
Compiled from Provincial Reports
1 April, 1957 to 31 March, 1958

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	4,074	4,475	27,491	36,040
Prince Edward Island...	2,853	431	4,480	7,764
Nova Scotia.....	21,674	14,115	95,524	131,313
New Brunswick.....	12,805	7,619	72,465	92,889
Ontario.....	63,626	61,885	338,310	463,821
Manitoba.....	5,695	3,875	51,901	61,471
Saskatchewan.....	7,002	1,922	42,483	51,407
Alberta.....	7,966	6,174	56,186	70,326
British Columbia.....	30,196	67,892	206,898	304,986
Terra Nova Park.....	17,554	4,388	47,970	69,912
Banff and Yoho Parks..	52,059	19,551	119,923	191,533
Glacier and Revelstoke Parks.....	5,945	1,199	9,022	16,166
Totals.....	231,449	193,526	1,072,653	1,497,628

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 2,545,968 for the same period.

TABLE No. 4—LABOUR REPORT—*Concluded*

10 December, 1949 to 31 March, 1958

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	47,129	70,293	430,259	547,681
Prince Edward Island...	25,737	7,254	91,325	124,316
Nova Scotia.....	49,494	25,406	179,957	254,857
New Brunswick.....	38,797	20,232	217,181	276,210
Ontario.....	308,526	389,830	1,816,139	2,514,495
Manitoba.....	51,479	28,215	290,117	369,811
Saskatchewan.....	141,414	91,140	425,715	658,269
Alberta.....	69,788	34,775	287,855	392,418
British Columbia.....	130,549	192,238	783,995	1,106,782
Terra Nova Park.....	17,554	4,388	47,970	69,912
Banff and Yoho Parks..	91,097	33,860	238,361	363,318
Glacier and Revelstoke Parks.....	5,945	1,199	9,022	16,166
Totals.....	977,509	898,830	4,817,896	6,694,235

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 11,380,200 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS

1 April, 1957 to 31 March, 1958

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 4,689,892.25	\$ 5,792,184.70
Prince Edward Island.....	793,103.75	779,711.88
Nova Scotia.....	3,318,825.20	2,806,212.60
New Brunswick.....	9,315,232.36	7,923,896.18
Ontario.....	21,887,793.13	13,561,706.56
Manitoba.....	5,369,206.00	3,385,475.40
Saskatchewan.....	—1,107,841.58	—533,795.78
Alberta.....	4,009,971.06	2,780,545.53
British Columbia.....	24,995,878.00	15,607,880.20
Totals.....	\$73,272,060.17	\$52,103,817.27

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS—*Concluded*
10 December, 1949 to 31 March, 1958

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$26,910,223.30	\$16,902,350.22
Prince Edward Island.....	7,275,623.99	4,305,172.00
Nova Scotia.....	10,852,595.20	6,573,097.60
New Brunswick.....	25,066,402.85	17,036,681.42
Ontario.....	120,965,055.12	67,613,247.55
Manitoba.....	28,774,366.55	15,088,055.68
Saskatchewan.....	27,759,207.27	15,864,748.65
Alberta.....	36,226,541.74	20,509,121.27
British Columbia.....	97,232,352.03	53,148,274.21
Totals.....	\$381,062,368.05	\$217,040,748.60

TABLE 5 (a)

Summary of Canada's Commitments for Additional 40 Percent Contributions from
1 April, 1957 to 31 March, 1958 (Included in Table No. 5).

Newfoundland.....	\$ 3,447,238.56
Prince Edward Island.....	383,160.00
Nova Scotia.....	1,146,800.00
New Brunswick.....	3,266,280.00
Ontario.....	2,617,810.00
Manitoba.....	700,872.40
Saskatchewan.....	20,125.00
Alberta.....	775,560.00
British Columbia.....	3,059,941.20
Totals.....	\$15,417,787.16

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS

1 April, 1957 to 31 March, 1958

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	—	\$ 861,313.26	\$ 861,313.26
Prince Edward Island.....	\$ 192,650.53	—	1,039,865.89	1,232,516.42
Nova Scotia.....	88,501.37	—	3,443,095.65	3,531,597.02
New Brunswick.....	12,193.84	—	3,545,780.89	3,557,974.73
Ontario.....	—	\$ -37,382.09	12,418,743.60	12,381,361.51
Manitoba.....	—	—	2,729,336.02	2,729,336.02
Saskatchewan.....	180,665.38	—	3,165,376.33	3,346,041.71
Alberta.....	475,943.78	—	4,813,679.39	5,289,623.17
British Columbia.....	2,244,097.56	—	14,174,188.02	16,418,285.58
Totals.....	\$3,194,052.46	\$* -37,382.09	\$ 46,191,379.05	\$ 49,348,049.42

*Represents refund of contributions made on account of a section of highway which has been abandoned in favour of a new location.

10 December, 1949 to 31 March, 1958

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 9,549,614.45	\$ 9,706,059.68
Prince Edward Island.....	\$ 288,383.09	—	2,984,149.11	3,272,532.20
Nova Scotia.....	88,501.37	—	4,704,212.13	4,792,713.50
New Brunswick.....	1,447,800.14	193,576.71	9,037,703.59	10,679,080.44
Ontario.....	1,569,640.35	299,790.79	39,370,877.80	41,240,308.94
Manitoba.....	983,812.08	17,958.54	11,888,305.84	12,890,076.46
Saskatchewan.....	270,753.29	3,103.38	14,777,531.82	15,051,388.49
Alberta.....	475,943.78	14,975.87	16,773,375.41	17,264,295.06
British Columbia.....	4,051,461.13	838,437.55	35,930,264.31	40,820,162.99
Totals.....	\$9,176,295.23	\$1,524,288.07	\$145,016,034.46	\$155,716,617.76

TABLE 6 (a)

Payments by Canada on Account of Additional 40% Contribution from
1 April, 1957 to 31 March, 1958 (Included in Table No. 6)

Newfoundland.....	\$ 343,851.61
Prince Edward Island.....	210,161.30
Nova Scotia.....	504,154.73
New Brunswick.....	908,366.38
Ontario.....	2,221,031.42
Manitoba.....	356,132.02
Saskatchewan.....	1,770,058.36
Alberta.....	1,418,534.53
British Columbia.....	1,503,952.94
Totals.....	<u>\$ 9,236,243.29</u>

TABLE 6 (b)

1 April, 1956 to 31 March, 1958 (Included in Table No. 6)

Newfoundland.....	\$ 343,851.61
Prince Edward Island.....	210,161.30
Nova Scotia.....	504,154.73
New Brunswick.....	1,631,634.23
Ontario.....	2,257,701.98
Manitoba.....	356,132.02
Saskatchewan.....	1,770,058.36
Alberta.....	1,714,513.52
British Columbia.....	1,563,353.50
Totals.....	<u>\$10,351,561.25</u>

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in the Schedule "A" of each Provincial Agreement may be described as follows:

NEWFOUNDLAND—From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarenville, Port Blandford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry the terminal of the Prince Edward Island-Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—From the New Brunswick-Nova Scotia border to Oxford, thence via Route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycocomagh, Baddeck and Little Bras d'Or to the Newfoundland Ferry Terminal at North Sydney.

NEW BRUNSWICK—From the intersection of provincial highway No. 2 and the Nova Scotia-New Brunswick boundary westerly to Aulac, thence easterly via provincial highway No. 16 to Cape Tormentine to provide a connecting link with the Ferry to Prince Edward Island, again, from Aulac via provincial highway No. 2, Sackville, Dorchester, Upper Dorchester, College Bridge and Memramcook to bypass Moncton on the North and return to provincial highway No. 2 near River Glade to Anagance, Penobsquis, and a diversion of the town of Sussex to the junction of highways No. 2 and No. 9; thence along provincial highway No. 9 via Coles Island, Young's Cove, Jemseg, Sheffield and Maugerville to a crossing of the Saint John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2 about two miles west of Fredericton; thence via Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, Meductic, and Woodstock to the junction of provincial highways No. 2 and No. 2B; thence on No. 2B to junction of No. 2 and No. 2B one mile south of Hartland, thence on No. 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent,

Kilburn, Perth, Andover, Arrostook, Grand Falls, St. Leonard, Green River, St. Basile, Edmundston, St. Jacques to the intersection of provincial Highway No. 2 with the Quebec boundary.

ONTARIO—Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway No. 7 to Lindsay; from there via highway No. 12 to Orillia and Waubesa; then northerly on a new location to MacTier on highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

MANITOBA—From the Ontario boundary to north of East Braintree, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with highway No. 1 west in the vicinity of St. Charles; thence west via Headingly, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and south-westerly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and south-westerly along the Canadian Pacific Railway line to three miles west of Oak Lake; thence north-westerly and paralleling the railway to the Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sintaluta, Indian Head, McLean, Balgonie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh.

ALBERTA—From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, thence north-westerly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River, south of Shouldice Bridge, and thence south of the Bow River to a crossing of the River

two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

WESTERN NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park, follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C. Further west in Glacier National Park the route of the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

BRITISH COLUMBIA—From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on Highway No. 1, thence south of Chilliwack to the Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge, by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the North boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT-OF-WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration—deceleration lanes are approved, and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB-BASE, ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H2O-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL SUPERVISING ENGINEERS DEVELOPMENT ENGINEERING BRANCH— HIGHWAYS DIVISION

NEWFOUNDLAND

A. L. Perley,
P.O. Box H-6001,
Buckmaster's Field,
St. John's, Nfld.
Phone: 80049

NOVA SCOTIA

H. F. Peters,
Box 875, Room 717,
Ralston Bldg.,
Halifax, N.S.
Phone 3:9221

NEW BRUNSWICK AND P.E.I.

G. D. Reid,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: Granite 5-9141

—and—

G. D. Reid,
Box 1298, Dominion Bldg.,
Charlottetown, P.E.I.
Phone: 6-555 or 5137.

ONTARIO

W. Koropatnick,
385 Yonge Street,
Toronto 1, Ont.
Phone: EM 2-2711

MANITOBA

J. A. Flatt,
705-169 Notre Dame Ave., E.,
Winnipeg 1, Man.
Phone. WHitehall 3-0601

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.,
Regina, Sask.
Phone: LA 3-2331

ALBERTA

J. E. Savage,
10225-100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 4-8086

BRITISH COLUMBIA

R. F. Petursson,
614 Elliott Street,
Victoria, B.C.
Phone: 2-5434

WESTERN NATIONAL PARKS

A. H. MacKinnon,
Federal Bldg.,
Banff, Alta.
Phone: 3321

A1 PW41

A55

Canada. Public Works, Department of



CANADA

Annual



REPORT *of*
PROCEEDINGS
UNDER THE
TRANS-CANADA
HIGHWAY ACT

For the Fiscal Year ended

MARCH 31

1959

DEPARTMENT OF PUBLIC WORKS



A VIEW OF THE TRANS-CANADA HIGHWAY IN BANFF NATIONAL PARK.

DEPARTMENT OF PUBLIC WORKS
Highways Division

ANNUAL REPORT
Proceedings Under
THE TRANS-CANADA HIGHWAY ACT

Fiscal Year Ended
MARCH 31, 1959



Issued under the Authority of the
HONOURABLE DAVID J. WALKER
Minister of Public Works
OTTAWA

THE QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1960

Price 25 cents Cat. No. W 41-59

To His Excellency Major-General

GEORGES P. VANIER, D.S.O., M.C., C.D.,

Governor-General and Commander-in-Chief of Canada.

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1959.

Respectfully submitted,

DAVID J. WALKER,

Minister of Public Works.

The Honourable DAVID J. WALKER,
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the tenth Annual Report of Proceedings under the Trans-Canada Highway Act., Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1959.

Your obedient servant,

H. A. YOUNG,
Deputy Minister.

CONTENTS

	PAGE
TRANS-CANADA HIGHWAY ACT.....	1
GENERAL REVIEW OF 1958.....	2
ADMINISTRATION.....	2
SUMMARY.....	2
Financial.....	2
Labour.....	3
Progress.....	3
TRANS-CANADA HIGHWAY IN NATIONAL PARKS.....	3
HIGHWAY STATISTICS.....	4
Table 1—Mileage, etc.....	4
Table 2—Grading Construction.....	5
Table 3—Paving Construction.....	6
Table 4—Labour Report.....	7
Table 5—Summary of Contractual Commitments.....	8
Table 5(a)—Summary of Commitments for Additional 40%.....	8
Table 6—Summary of Payments to Provincial Governments.....	9
Table 6(a)—Payments by Canada re Additional 40%.....	10
Table 6(b)—Summary of Payments by Canada re Additional 40%.....	10
APPENDICES	
A—Schedule A—Route of Highway.....	11
B—Schedule B—General Specifications.....	14
C—Federal Supervising Engineers.....	16

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1959

The Trans-Canada Highway Act

The Trans-Canada Highway Act 1949, c (40), s.1, became effective on December 10, 1949. Under this Act, Agreements covering Canada's participation in the cost of construction of a Trans-Canada Highway were entered into with each of the participating Provinces. The Act, with the Agreements, provided for Canada's contribution to the extent of fifty percent of the cost of new construction and up to fifty percent of the cost of construction of sections of highway built prior to the passing of the Act, where these sections are properly incorporated in the Trans-Canada Highway. Canada's total contribution under this Act was limited to \$150,000,000.

An Amendment to the Act in 1956 increased the extent of Canada's contribution to the cost of new construction by providing for an additional forty percent contribution on one-tenth of the highway mileage in each Province. The construction period was extended to the 31st day of December, 1960, and the aggregate limit of the funds available for expenditure by Canada was increased to \$250,000,000. New Agreements, on the basis of the amended Act, were entered into with each of the participating Provinces.

A second Amendment to the Trans-Canada Highway Act received Royal Assent on the 20th of March, 1959. This amendment provided for an increase of \$100,000,000. in the amount of the federal contribution to the cost of constructing the highway. The aggregate limit of the funds available for expenditure by Canada, under the Act and the Amendments, is now \$350,000,000.

The present Agreements provide for a paved highway across Canada by the 31st day of December, 1960. The Agreements provide that the highway shall be completed in conformity with the general specifications set out in Schedule "B", or that it shall constitute a good standard of paved highway. It is not necessary that all of the highway be brought up to the standard specified for the Trans-Canada Highway. Under this provision a Province is not compelled to reconstruct sections of the highway which are now paved to a satisfactory provincial standard. This has made it possible to speed up the work on those sections where reconstruction and paving is most essential. Canada's participation in the cost is limited to that portion of the paved road which is constructed to Trans-Canada Highway standards.

Schedule "A" of the Agreement with each Province designates the route of the highway within the Province. General specifications covering the standard of construction are contained in Schedule "B". These schedules are covered in this report in Appendices "A" and "B".

General Review of 1958

The progress of construction during the 1958 season was generally satisfactory with most Provinces proceeding with the work at an accelerated pace in order to ensure that travel will be possible on a paved road over the entire highway mileage by December, 1960. This may be so in all Provinces except Newfoundland although in that Province, where there previously existed a physical gap of 51 miles between Clarendville and Alexander Bay, it is now possible to travel over a graded highway on the entire provincial mileage.

Grading on the physical gap section between the Agawa River and Marathon in the Province of Ontario is proceeding at a rapid rate. In this 164 mile gap section grading has been completed on approximately 125 miles and it is expected that the grading will be completed in 1959. Paving is in progress on the completely graded sections and is nearing completion on approximately 33 miles.

There is a physical gap of approximately 82 miles in the Province of British Columbia through the Rogers Pass from Revelstoke to Donald. Forty-five miles of this gap is on the provincial section of the Trans-Canada Highway and 37 miles is through Revelstoke and Glacier National Parks. Grading contracts have been awarded by the Province on the entire provincial section. In the National Parks contracts have been awarded for grading throughout and for all structures. It is expected that construction on these sections will be completed by December 1960. In the meantime the Big Bend Highway provides an alternate route for this physical gap, but from November until June or later this highway is closed to traffic.

Administration

Responsibility for the design of the Highway and its construction rests initially with the provincial governments. Plans, specifications and contract documents are subject to revision and approval by the Federal Government. The Highways Division of the Development Engineering Branch of the Department of Public Works co-operates with the provincial authorities in determining the final construction costs of the Highway and its engineers ensure that the terms of the Agreement are carried out. Inspections are made, in co-operation with provincial engineers, during all phases of construction.

The Supervising Engineers and Inspecting Engineers of the Division are situated at strategic locations in the Provinces. The Supervising Engineers and their office locations are as shown in Appendix "C".

Summary

Financial

From December, 1949 to March 31, 1959, funds to a total of \$466,456,047.49 were approved for provincial government commitments on contracts for the construction of the Trans-Canada Highway. Commitments during the fiscal year 1958-59 totalled \$85,393,679.44. Canada's share of the 1958-59 commitments totalled \$63,616,967.01, of which \$20,920,127.31 represents commitments on account of the additional 40 percent contribution to be made to the cost of construction on 10 percent

of the Highway mileage. Payments to the provinces during the 1958-59 fiscal year totalled \$51,129,958.11, an increase of \$1,781,908.69 over the payments made in the previous fiscal year.

Labour

Provincial reports show that Trans-Canada Highway projects provided 1,281,985 man days (8 hours) of employment during the fiscal year. Off-site labour created by the supply of materials and services is estimated at an additional 2,179,375 man days (8 hours).

Progress

The mileage of the Highway approved for grading to the end of March 1959, totalled 3,117 of which 2,791 miles have been constructed to the required standard. The mileage approved for paving totalled 2,117 of which 2,023 miles were completed. Four hundred and four structures have been approved for construction of which 300 were completed prior to March 31, 1959.

Trans-Canada Highway in National Parks

The Highways Division of the Development Engineering Branch is responsible for the location, design and construction of the Highway through the National Parks, a total distance of approximately 143 miles through five Parks.

Terra Nova National Park

Contracts for grading already awarded will be completed during the coming year, and contracts totalling some \$867,600 were awarded for crushing and stockpiling granular base course material for the surfacing of the entire distance through the Park. In addition contracts amounting to \$304,060 were awarded for concrete structures over Big Brook, Bread Cove, Southwest Brook and Salton's Brook.

Banff National Park

A contract totalling \$636,639.65 was completed for 21.6 miles of bituminous stabilized base course. With the completion of this contract the entire distance through Banff National Park has received a base course surfacing. A contract was also awarded totalling \$364,516.00 for the construction of a rigid frame concrete structure, and grade separation at Norquay Junction near Banff Townsite. A further contract was awarded for \$519,664.00 for the crushing and stockpiling of bituminous concrete aggregate for paving the 51-odd miles of Highway through this Park.

Yoho National Park

A contract for the laying of approximately 16.4 miles of bituminous stabilized base course was awarded for \$454,577.00 thus completing the base course surfacing of the entire highway through Yoho National Park. A further contract amounting to \$295,495.50 was awarded for the crushing and stockpiling of bituminous concrete aggregate for the final surfacing of the 28.6 miles of highway through this Park.

Glacier National Park

Clearing was completed through Glacier National Park during the year and grading contracts amounting to \$8,867,230.80 were awarded.

Contracts totalling \$652,331.70 were awarded for structures at Bear Creek, Cougar Creek, Loop Creek and two crossings of the Illecillewaet River and a concrete arch culvert is to be installed at the Illecillewaet River near Loop Creek. With the awarding of these contracts the grading and structures program for this section of highway enters its final stage.

Mount Revelstoke National Park

Clearing was completed through Revelstoke National Park during the year, and a contract totalling \$1,978,785.50 was awarded for grading the 7.7 miles of highway through the Park. Contracts amounting to \$419,110.85 were awarded for a concrete arch culvert at Clachnacudainn Creek, a bridge at Silver Creek, and an overpass at the Mount Revelstoke Park Entrance Road.

Highway Statistics

The following tables furnish a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1959, and include information pertaining specifically to the fiscal year under review in this report:

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage Under New Agreement

<i>Provinces</i>	<i>Total Mileage</i>	<i>Approximate Passable Mileage</i>	<i>†Paved Mileage</i>
Newfoundland.....	554	554	52
Prince Edward Island.....	71	71	70
Nova Scotia.....	311	311	221
New Brunswick.....	390	390	318
Ontario.....	1,436	1,327	978
Manitoba.....	309	309	293
Saskatchewan.....	406	406	406
Alberta.....	282	282	276
British Columbia.....	568	568	359
National Parks.....	143	80	* 80
Totals.....	4,470	4,298	3,053

*Bituminous stabilized base course.

†Including mileages payed to provincial standard on designated route. Previous mileages under this heading included some sections of pavement used in lieu of sections of the designated route not open to traffic.

TABLE No. 2—GRADING CONSTRUCTION
1 April, 1958 to 31 March, 1959

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	13	30
Prince Edward Island.....	—	1
Nova Scotia.....	20	14
New Brunswick.....	38	30
Ontario.....	175	146
Manitoba.....	4	10
Saskatchewan.....	—	—
Alberta.....	3	3
British Columbia.....	48	50
Terra Nova Park.....	—	12
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	37	6
Totals.....	338	302

10 December, 1949 to 31 March, 1959

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	375	277
Prince Edward Island.....	71	71
Nova Scotia.....	118	108
New Brunswick.....	158	148
Ontario.....	848	719
Manitoba.....	244	244
Saskatchewan.....	406	406
Alberta.....	278	278
British Columbia.....	476	434
Terra Nova Park.....	26	20
Banff and Yoho Parks.....	80	80
Glacier and Revelstoke Parks.....	37	6
Totals.....	3,117	2,791

TABLE No. 3—PAVING CONSTRUCTION
1 April, 1958 to 31 March, 1959

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	51	35
Prince Edward Island.....	—	3
Nova Scotia.....	24	26
New Brunswick.....	8	16
Ontario.....	157	101
Manitoba.....	19	43
Saskatchewan.....	—	—
Alberta.....	64	62
British Columbia.....	30	30
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	* 80
Glacier and Revelstoke Parks.....	—	—
Totals.....	353	396

*Bituminous stabilized base course.

10 December, 1949 to 31 March, 1959

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	51	35
Prince Edward Island.....	70	70
Nova Scotia.....	26	26
New Brunswick.....	96	94
Ontario.....	609	535
Manitoba.....	289	289
Saskatchewan.....	406	406
Alberta.....	278	276
British Columbia.....	292	292
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	* 80
Glacier and Revelstoke Parks.....	—	—
Totals.....	2,117	2,103

*Bituminous stabilized base course.

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) "On Site" Work on Trans-Canada Highway

Compiled from Provincial Reports

1 April, 1958 to 31 March, 1959

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	7,842	17,545	77,141	102,528
Prince Edward Island...	2,850	1,547	15,667	20,064
Nova Scotia.....	12,112	7,534	47,733	67,379
New Brunswick.....	12,445	11,669	121,062	145,176
Ontario.....	69,648	49,608	324,102	443,358
Manitoba.....	8,047	4,766	50,848	63,661
Saskatchewan.....	—	—	—	—
Alberta.....	4,937	2,993	19,439	27,369
British Columbia.....	31,432	35,200	151,528	218,160
Terra Nova Park.....	21,842	6,982	65,694	94,518
Banff and Yoho Parks..	16,243	2,220	12,656	31,119
Glacier and Revelstoke Parks.....	32,656	4,629	31,368	68,653
Totals.....	220,054	144,693	917,238	1,281,985

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 2,179,375 for the same period.

10 December, 1949 to 31 March 1959

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	54,971	87,838	507,400	650,209
Prince Edward Island...	28,587	8,801	106,992	144,380
Nova Scotia.....	61,606	32,940	227,690	322,236
New Brunswick.....	51,242	31,901	338,243	421,386
Ontario.....	378,174	439,438	2,140,241	2,957,853
Manitoba.....	59,526	32,981	340,965	433,472
Saskatchewan.....	141,414	91,140	425,715	658,269
Alberta.....	74,725	37,768	307,294	419,787
British Columbia.....	161,981	227,438	935,523	1,324,942
Terra Nova Park.....	39,396	11,370	113,664	164,430
Banff and Yoho Parks..	107,340	36,080	251,017	394,437
Glacier and Revelstoke Parks.....	38,601	5,828	40,390	84,819
Totals.....	1,197,563	1,043,523	5,735,134	7,976,220

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 13,559,574 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS
1 April, 1958 to 31 March, 1959

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 4,650,524.50	\$ 2,481,262.25
Prince Edward Island.....	1,317,741.79	1,118,574.00
Nova Scotia.....	9,733,680.61	8,423,840.30
New Brunswick.....	13,894,244.43	9,982,825.58
Ontario.....	31,657,578.45	21,430,844.21
Manitoba.....	2,792,254.60	2,408,213.14
Saskatchewan.....	—	—
Alberta.....	—738,611.60	323,334.20
British Columbia.....	22,086,266.66	17,448,073.33
Totals.....	\$85,393,679.44	\$63,616,967.01

10 December, 1949 to 31 March, 1959

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 31,560,747.80	\$ 19,383,612.47
Prince Edward Island.....	8,593,365.78	5,423,746.00
Nova Scotia.....	20,586,275.81	14,996,937.90
New Brunswick.....	38,960,647.28	27,019,507.00
Ontario.....	152,622,633.57	89,044,091.76
Manitoba.....	31,566,621.15	17,496,268.82
Saskatchewan.....	27,759,207.27	15,864,748.65
Alberta.....	35,487,930.14	20,832,455.47
British Columbia.....	119,318,618.69	70,546,347.54
Totals.....	\$466,456,047.49	\$280,607,715.61

TABLE 5 (a)

Summary of Canada's Commitments for Additional 40 Percent Contributions from
1 April, 1958 to 31 March, 1959 (Included in Table No. 5).

Newfoundland.....	\$ 156,000.00
Prince Edward Island.....	459,703.11
Nova Scotia.....	3,557,000.00
New Brunswick.....	3,035,703.37
Ontario.....	5,602,054.99
Manitoba.....	1,012,085.84
Saskatchewan.....	—
Alberta.....	692,640.00
British Columbia.....	6,404,940.00
Totals.....	\$20,920,127.31

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
1 April, 1958 to 31 March, 1959

Province	Prior Construction	Interim Construction	New Construction	Totals
Newfoundland.....	—	—	\$ 4,753,051.40	\$ 4,753,051.40
Prince Edward Island.....	—	—	535,114.47	535,114.47
Nova Scotia.....	—	—	2,473,725.12	2,473,725.12
New Brunswick.....	—	—	11,352,822.39	11,352,822.39
Ontario.....	\$ 1,995,903.13	—	13,917,074.88	15,912,978.01
Manitoba.....	* —96,365.33	—	1,910,883.47	1,814,518.14
Saskatchewan.....	—	—	168,302.64	168,302.64
Alberta.....	—	—	2,228,574.81	2,228,574.81
British Columbia.....	—	—	11,890,871.13	11,890,871.13
Totals.....	\$ 1,899,537.80	—	\$ 49,230,420.31	\$ 51,129,958.11

* Represents refund of contributions made on account of a section of highway which has been abandoned in favour of a new location.

10 December, 1949 to 31 March, 1959

Province	Prior Construction	Interim Construction	New Construction	Totals
Newfoundland.....	—	\$ 156,445.23	\$ 14,302,665.85	\$ 14,459,111.08
Prince Edward Island.....	\$ 288,383.09	—	3,519,263.58	3,807,646.67
Nova Scotia.....	88,501.37	—	7,177,937.25	7,266,438.62
New Brunswick.....	1,447,800.14	193,576.71	20,390,525.98	22,031,902.83
Ontario.....	3,565,543.48	299,790.79	53,287,952.68	57,153,286.95
Manitoba.....	887,446.75	17,958.54	13,799,189.31	14,704,594.60
Saskatchewan.....	270,753.29	3,103.38	14,945,834.46	15,219,691.13
Alberta.....	475,943.78	14,975.87	19,001,950.22	19,492,869.87
British Columbia.....	4,051,461.13	838,437.55	47,821,135.44	52,711,034.12
Totals.....	\$11,075,833.03	\$1,524,288.07	\$194,246,454.77	\$206,846,575.87

TABLE 6 (a)

Payments by Canada on Account of Additional 40% Contribution from
1 April, 1958 to 31 March, 1959 (Included in Table No. 6)

Newfoundland.....	\$ 1,575,109.92
Prince Edward Island.....	150,057.35
Nova Scotia.....	714,958.72
New Brunswick.....	3,675,290.02
Ontario.....	2,885,393.32
Manitoba.....	661,121.97
Saskatchewan.....	51,224.84
Alberta.....	740,341.15
British Columbia.....	2,627,769.90
Totals.....	<u>\$13,081,267.19</u>

TABLE 6 (b)

1 April, 1956 to 31 March, 1959 (Included in Table No. 6)

Newfoundland.....	\$ 1,918,961.53
Prince Edward Island.....	360,218.65
Nova Scotia.....	1,219,113.45
New Brunswick.....	5,306,924.25
Ontario.....	5,143,095.30
Manitoba.....	1,017,253.99
Saskatchewan.....	1,821,283.20
Alberta.....	2,454,854.67
British Columbia.....	4,191,123.40
Totals.....	<u>\$23,432,828.44</u>

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in the Schedule "A" of each Provincial Agreement may be described as follows:

NEWFOUNDLAND—From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarenville, Port Blandford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry the terminal of the Prince Edward Island-Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—From the New Brunswick-Nova Scotia border to Oxford, thence via Route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycocomagh, Baddeck and Little Bras d'Or to the Newfoundland Ferry Terminal at North Sydney.

NEW BRUNSWICK—From the intersection of provincial highway No. 2 and the Nova Scotia-New Brunswick boundary westerly to Aulac, thence easterly via provincial highway No. 16 to Cape Tormentine to provide a connecting link with the Ferry to Prince Edward Island, again from Aulac via provincial highway No. 2, Sackville, Dorchester, Upper Dorchester, College Bridge and Memramcook to bypass Moncton on the North and return to provincial highway No. 2 near River Glade to Anagance, Penobsquis, and a diversion of the town of Sussex to the junction of highways No. 2 and No. 9; thence along provincial highway No. 9 via Coles Island, Young's Cove, Jemseg, Sheffield and Maugerville to a crossing of the Saint John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2 about two miles west of Fredericton; thence via Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, Meductic, and Woodstock to the junction of provincial highways No. 2 and No. 2B; thence on No. 2B to junction of No. 2 and No. 2B one mile south of Hartland, thence on No. 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent, Kilburn, Perth, Andover, Aroostook, Grand Falls, St. Leonard, Green River, St. Basile, Edmundston, St. Jacques to the intersection of provincial Highway No. 2 with the Quebec boundary.

ONTARIO—Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway No. 7 to Lindsay; from there via highway No. 12 to Orillia and Waubauskene; then northerly on a new location to MacTier on highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

MANITOBA—From the Ontario boundary to north of East Braintree, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with highway No. 1 west in the vicinity of St. Charles; thence west via Headingley, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and southwesterly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and southwesterly along the Canadian Pacific Railway line to three miles west of Oak Lake; thence northwesterly and paralleling the railway to the Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sinaluta, Indian Head, McLean, Balgonie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh.

ALBERTA—From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, thence northwesterly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River, south of Shouldice Bridge, and thence south of the Bow River to a crossing of the River two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

WESTERN NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park, follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C. Further west in Glacier National Park the route of the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

BRITISH COLUMBIA—From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on Highway No. 1 thence south of Chilliwack to the Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge, by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the North boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT-OF-WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration—deceleration lanes are approved, and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB-BASE, ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL SUPERVISING ENGINEERS
DEVELOPMENT ENGINEERING BRANCH
HIGHWAYS DIVISION

NEWFOUNDLAND

A. L. Perley,
P.O. Box H-6001,
Buckmaster's Field,
St. John's, Nfld.
Phone: 80049

PRINCE EDWARD ISLAND

H. A. Nason (Acting),
Box 1298, Dominion Bldg.,
Charlottetown, P.E.I.
Phone: 6-555 or 5137

NOVA SCOTIA

H. F. Peters,
Box 875, Room 717
Ralston Bldg.,
Halifax, N.S.
Phone: 3:9221

NEW BRUNSWICK

H. A. Nason (Acting),
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: Granite 5-9141

ONTARIO

W. Koropatnick,
385 Yonge Street,
Toronto 1, Ont.
Phone: EM 2-2711

MANITOBA

J. A. Flatt,
705-169 Notre Dame Ave., E.,
Winnipeg, Man.
Phone: Whitehall 3-0601

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.,
Regina, Sask.
Phone: LA 3-2331

ALBERTA

J. E. Savage,
10225-100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 4-8086

BRITISH COLUMBIA

R. F. Petursson,
614 Elliott Street,
Victoria, B.C.
Phone: 2-5434

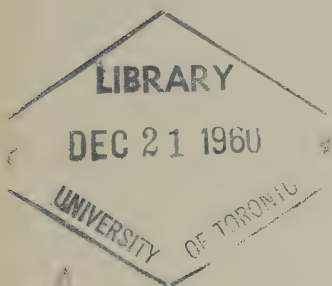
WESTERN NATIONAL PARKS

A. H. MacKinnon,
Federal Bldg.,
Banff, Alta.
Phone: 3321

A1 PW 41

A55

Canada, Public Works, Dept. of



CANADA

Annual

REPORT of
PROCEEDINGS
UNDER THE
TRANS-CANADA
HIGHWAY ACT

5/1/60

For the Fiscal Year ended

MARCH 31

1959/
1960

DEPARTMENT OF PUBLIC WORKS



A VIEW OF THE TRANS CANADA HIGHWAY LOOKING WEST FROM THE FOOT OF SALT MOUNTAIN, N.S., WITH WHYCOCOMAGH BAY IN THE BACKGROUND.

DEPARTMENT OF PUBLIC WORKS
Highways Division

ANNUAL REPORT
Proceedings Under
THE TRANS-CANADA HIGHWAY ACT
Fiscal Year Ended
MARCH 31, 1960



Issued under the Authority of the
HONOURABLE DAVID J. WALKER
Minister of Public Works
OTTAWA

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1960

Price 25 cents Cat. No. W 41-60

To His Excellency Major-General

GEORGES P. VANIER, D.S.O., M.C., C.D.,

Governor-General and Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1960.

Respectfully submitted,

DAVID J. WALKER

Minister of Public Works.

The Honourable DAVID J. WALKER,
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the eleventh Annual Report of Proceedings Under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1960.

Your obedient servant,

H. A. YOUNG
Deputy Minister.

CONTENTS

	PAGE
TRANS-CANADA HIGHWAY ACT.....	1
GENERAL REVIEW OF 1959.....	2
ADMINISTRATION.....	2
SUMMARY.....	2
Financial.....	2
Labour.....	3
Progress.....	3
TRANS-CANADA HIGHWAY IN NATIONAL PARKS.....	3
HIGHWAY STATISTICS.....	4
Table 1—Mileage, etc.....	4
Table 2—Grading Construction.....	5
Table 3—Paving Construction.....	6
Table 4—Labour Report.....	7
Table 5—Summary of Contractual Commitments.....	8
Table 5(a)—Summary of Commitments for Additional 40%.....	8
Table 6—Summary of Payments to Provincial Governments.....	9
Table 6(a)—Payments by Canada re Additional 40%....	10
Table 6(b)—Summary of Payments by Canada re Additional 40%.....	10
APPENDICES:	
A—Schedule A—Route of Highway.....	11
B—Schedule B—General Specifications.....	14
C—Federal Supervising Engineers.....	16

REPORT OF
 PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
 FOR THE FISCAL YEAR ENDED MARCH 31, 1960

THE TRANS-CANADA HIGHWAY ACT

Canada's participation in the construction of the Trans-Canada Highway was authorized when Parliament passed the Trans-Canada Highway Act, 1949, Chap. (40) s.I. Under this Act, and the Agreements made with the participating provinces, Canada is authorized to contribute fifty percent of the cost of new construction and up to fifty percent of the cost of construction of sections of the highway built before the Act was passed, where these sections were properly incorporated in the Trans-Canada Highway. Canada's total contribution under this Act was limited to \$150,000,000 during a construction period of seven years next following December 10, 1949.

An Amendment to the Act in 1956 extended the construction period to December 31, 1960, and increased the extent of Canada's contribution to the cost of new construction by providing for an additional 40 percent contribution on one-tenth of the highway mileage in each province. The aggregate limit of the funds available for expenditure by Canada was increased to \$250,000,000. This limit was increased to \$350,000,000 by a second Amendment to the Act in March, 1959.

Agreements under the amended Act were entered into with the participating Provinces as follows:

Newfoundland.....	November 19, 1956
Prince Edward Island.....	June 25, 1956
Nova Scotia.....	September 4, 1956
New Brunswick.....	June 8, 1956
Ontario.....	July 27, 1956
Manitoba.....	June 8, 1956
Saskatchewan.....	June 8, 1956
Alberta.....	June 22, 1956
British Columbia.....	December 6, 1956

These Agreements provided for a paved highway across Canada by December 31st, 1960. They also provided that the highway should be completed in accordance with the general specifications outlined in Schedule "B" of the Agreements, or that it should constitute a good standard of paved highway.

It is now apparent that the construction of the Highway can not be completed in all of the participating Provinces by December 31, 1960. Legislation introduced at the present Session of Parliament provided for the extension of the construction period to December 31, 1963 and for the aggregate amount that may be spent by Canada to be increased to \$400,000,000.

Appendices "A" and "B" of this report contain outlines of Schedules "A" and "B" of the Agreements with the provinces. Schedule "A" designates the route of the highway within each province and Schedule "B" the general specifications.

General Review of 1959

The estimated cost of the work authorized for construction in the fiscal year under review exceeded \$91.6 million or 16.4 percent of the estimated cost of all work authorized since the passing of the Act in 1949. Much of this work has been completed and it is evident that the Provinces are making every effort to complete the greatest possible amount of work before the expiration of the present Trans-Canada Highway Agreements.

There are now only two physical gaps throughout the entire length of the highway, one in Ontario and the other in British Columbia. Originally in Ontario the gap extended from Agawa to Marathon. With the exception of two short sections totalling 45 miles, grading has been completed and a considerable mileage paved. It is expected that travel will be possible over the entire section in late 1960, although the paving may not be entirely completed in that year. In British Columbia, the physical gap extends through the Rogers Pass section of the Highway where the terrain presents some of the Province's most difficult construction problems. Grading contracts have been awarded and work is in progress throughout the entire length of the gap section.

Administration

Responsibility for the design of the Highway and its construction rest initially with the provincial governments. The Highways Division of the Development Engineering Branch, Department of Public Works, co-operates with the provincial authorities in determining the final construction costs. The engineers of the division ensure that the terms of the Agreements are carried out and inspections are made, in co-operation with provincial engineers, during all phases of construction. Plans, specifications and contract documents are subject to review and approval by the Federal Government.

The Supervising Engineers and Inspecting Engineers of the Division are situated in each province. Their names and office locations are as shown in Appendix "C".

Summary

Financial

From December, 1949 to March 31, 1960, the approved provincial government commitments on contracts for the construction of the Trans-Canada Highway totalled \$558,117,205.45. Commitments during the fiscal year 1959-60 were \$91,661,157.96. Canada's share of the 1959-60 commitments is estimated at \$52,373,883.74 of which \$6,543,304.77 represents commitments on account of the additional forty percent contribution to be made to the cost of construction on ten percent of the Highway mileage.

Payments to the provinces during the 1959-60 fiscal year totalled \$53,264-008.32, an increase of \$2,134,050.25 over the payments made in the previous fiscal year.

Labour

Provincial reports show that Trans-Canada Highway projects provided 1,531,155 man days (8 hours) of employment during the fiscal year. Offsite labour created by the supply of materials and services is estimated at an additional 2,602,964 man days (8 hours).

Progress

The mileage of the highway approved for grading to the end of March, 1960 totalled 3,317 of which 3,068 miles were built to the required standard. The mileage approved for paving totalled 2,537 of which 2,373 miles were completed. Four hundred and fifty-four structures have been approved for construction of which three hundred and seventy-one were completed before March 31, 1960.

Trans-Canada Highway in National Parks

The construction of the Trans-Canada Highway through National Parks, for which the Department of Public Works is directly responsible, continued satisfactorily except in Glacier National Park where construction was slowed by exceptionally wet weather during the summer season.

Terra Nova National Park

Grading and construction of the four structures required at Salton's Brook, Southwest Brook, Bread Cove and Big Brook have been completed. Granular base course material has been placed on fifteen miles and stock-piled for the remaining ten miles. The road has been open to traffic for some time and it is planned next year to place the bituminous stabilized base course, install guide rails and sign posts where required, mark the centre line and complete clean-up.

Banff and Yoho National Parks

The bituminous base course, which provided a good paved surface, has been completed throughout both parks for approximately a year. In general the road base has stood up remarkably well with minor subsidence in only three or four areas. Sign posting and centre line marking have been completed. Work remaining to be done consists of placing the final pavement and clean-up.

Glacier and Revelstoke National Parks

Construction was delayed since the decision to follow the Rogers Pass route between Golden and Revelstoke was not finally agreed upon until 1956. In addition the contractor faced great difficulties because of the wet season so that progress was not up to expectations. In spite of this, grading is approximately 65 percent complete in Glacier and 85 percent complete in Revelstoke Park. Construction of the six bridges required in Glacier Park is well underway and the three bridges (including an overpass) in Revelstoke Park have been completed.

The avalanche investigations which have been underway for several years in Glacier National Park have been beneficial. All defences have been planned in detail, the construction of earth defences (mounds, benches and dams) is well underway, and designs are complete for snowsheds utilizing four types of construction material (concrete, steel, timber and corrugated plate arch). For the past two years our Avalanche Organization has been operating an avalanche forecasting system as though the road were open and it has proven to be remarkably accurate.

Highway Statistics

The following tables furnish a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1960, and include information pertaining specifically to the fiscal year under review:

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage Under New Agreement.

<i>Provinces</i>	<i>Total Mileage</i>	<i>Approximate Passable Mileage</i>	<i>Paved Mileage¹</i>
Newfoundland.....	554	554	77
Prince Edward Island.....	71	71	71 ²
Nova Scotia.....	318	318	229
New Brunswick.....	390	390	330
Ontario.....	1,453	1,408 ³	986
Manitoba.....	309	309	301
Saskatchewan.....	406	406	406
Alberta.....	282	282	278
British Columbia.....	568	526 ⁴	396
National Parks.....	140	105 ⁵	80
Totals.....	4,491	4,369	3,154

¹ Includes mileage on designated route paved prior to December 12, 1949.

² Hillsborough Bridge under construction.

³ Excludes gap section of 45 miles north of Agawa River.

⁴ Excludes gap section of 42 miles of provincial highway through Rogers Pass Route. During winter months the alternate route via the Big Bend Highway is closed to traffic.

⁵ Excludes gap section of 35 miles through Glacier and Revelstoke National Parks.

TABLE No. 2—GRADING CONSTRUCTION

1 April, 1959 to 31 March, 1960

<i>Province</i>	<i>Miles Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	—	11
Prince Edward Island.....	—	—
Nova Scotia.....	1	10
New Brunswick.....	32	33
Ontario.....	109	153
Manitoba.....	6	1
Saskatchewan.....	—	—
Alberta.....	3	2
British Columbia.....	52	43
Terra Nova Park.....	—	5
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	19
Totals.....	203	277

10 December, 1949 to 31 March, 1960

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	375	288
Prince Edward Island.....	71	71
Nova Scotia.....	119	118
New Brunswick.....	190	181
Ontario.....	957	872
Manitoba.....	250	245
Saskatchewan.....	406	406
Alberta.....	281	280
British Columbia.....	528	477
Terra Nova Parks.....	25*	25
Banff and Yoho Parks.....	80	80
Glacier and Revelstoke Parks.....	35*	25
Totals.....	3,317	3,068

*Revised Mileages.

TABLE No. 3—PAVING CONSTRUCTION

1 April, 1959 to 31 March, 1960

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	57	28
Prince Edward Island.....	1	1
Nova Scotia.....	54	8
New Brunswick.....	46	39
Ontario.....	166	115
Manitoba.....	8	8
Saskatchewan.....	—	—
Alberta.....	3	2
British Columbia.....	85	69
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	—
Totals.....	420	270

10 December, 1949 to 31 March, 1960

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	108	63
Prince Edward Island.....	71	71
Nova Scotia.....	80	34
New Brunswick.....	142	133
Ontario.....	775	650
Manitoba.....	297	297
Saskatchewan.....	406	406
Alberta.....	281	278
British Columbia.....	377	361
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	80*
Glacier and Revelstoke Parks.....	—	—
Totals.....	2,537	2,373

*Bituminous stabilized base course.

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) "On Site" Work on Trans-Canada Highway
Compiled from Provincial Reports

1 April, 1959 to 31 March, 1960

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	8,030	20,994	109,259	138,283
Prince Edward Island...	681	1,230	13,631	15,542
Nova Scotia.....	8,710	7,554	77,779	94,043
New Brunswick.....	40,650	12,584	141,645	194,879
Ontario.....	110,054	60,302	377,595	547,951
Manitoba.....	1,663	2,043	18,298	22,004
Saskatchewan.....	175	113	637	925
Alberta.....	3,077	1,749	11,570	16,396
British Columbia.....	38,178	30,601	224,223	293,002
Terra Nova Park.....	13,628	2,788	29,618	46,034
Banff and Yoho Parks..	7,966	2,163	14,763	24,892
Glacier and Revelstoke Parks.....	34,844	8,621	93,739	137,204
Totals.....	267,656	150,742	1,112,757	1,531,155

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 2,602,964 for the same period.

10 December, 1959 to 31 March, 1960.

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	63,001	108,832	616,659	788,492
Prince Edward Island...	29,268	10,031	120,623	159,922
Nova Scotia.....	70,316	40,494	305,469	416,279
New Brunswick.....	91,892	44,485	479,888	616,265
Ontario.....	488,228	499,740	2,517,836	3,505,804
Manitoba.....	61,189	35,024	359,263	455,476
Saskatchewan.....	141,589	91,253	426,352	659,194
Alberta.....	77,802	39,517	318,864	436,183
British Columbia.....	200,159	258,039	1,159,746	1,617,944
Terra Nova Park.....	53,024	14,158	143,282	210,464
Banff and Yoho Parks..	115,306	38,243	265,780	419,329
Glacier and Revelstoke Parks.....	73,445	14,449	134,129	222,023
Totals.....	1,465,219	1,194,265	6,847,891	9,507,375

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 16,162,538 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS
1 April, 1959 to 31 March, 1960

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....\$	7,347,693.00	\$ 5,188,683.70
Prince Edward Island.....	508,330.00	457,497.00
Nova Scotia.....	1,731,648.40	1,020,386.20
New Brunswick.....	9,228,171.23	5,289,548.21
Ontario.....	27,320,595.93	15,043,897.96
Manitoba.....	1,574,080.00	1,382,560.00
Saskatchewan.....	78,551.80	39,275.90
Alberta.....	1,534,877.43	1,310,349.69
British Columbia.....	42,337,210.17	22,641,685.08
Totals.....\$	91,661,157.96	\$ 52,373,883.74

10 December, 1949 to 31 March, 1960

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....\$	38,908,440.80	\$ 24,572,296.17
Prince Edward Island.....	9,101,695.78	5,881,243.00
Nova Scotia.....	22,317,924.21	16,017,324.10
New Brunswick.....	48,188,818.51	32,309,055.21
Ontario.....	179,943,229.50	104,087,989.72
Manitoba.....	33,140,701.15	18,878,828.82
Saskatchewan.....	27,837,759.07	15,904,024.55
Alberta.....	37,022,807.57	22,142,805.16
British Columbia.....	161,655,828.86	93,188,032.62
Totals.....\$	558,117,205.45	\$ 332,981,599.35

TABLE 5 (a)

**Summary of Canada's Commitment for Additional 40 Percent Contributions from
1 April, 1959 to 31 March, 1960 (Included in Table No. 5).**

Newfoundland.....	\$1,514,837.20
Prince Edward Island.....	203,332.00
Nova Scotia.....	154,562.00
New Brunswick.....	675,462.60
Ontario.....	1,383,600.00
Manitoba.....	595,520.00
Saskatchewan.....	—
Alberta.....	542,910.97
British Columbia.....	1,473,080.00
Totals.....	\$6,543,304.77

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
1 April, 1959 to 31 March, 1960

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	—	\$ 5,353,270.83	\$ 5,353,270.83
Prince Edward Island.....	—	—	1,172,315.42	1,172,315.42
Nova Scotia.....	—	—	3,128,648.30	3,128,648.30
New Brunswick.....	—	—	8,121,192.12	8,121,192.12
Ontario.....	—	—	18,436,103.64	18,436,103.64
Manitoba.....	—	—	1,724,709.66	1,724,709.66
Saskatchewan.....	—	—	32,770.06	32,770.06
Alberta.....	—	—	1,066,131.11	1,066,131.11
British Columbia.....	—	—	14,228,867.18	14,228,867.18
Totals.....	—	—	\$ 53,264,008.32	\$ 53,264,008.32

10 December, 1949 to 31 March, 1960

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 19,655,936.68	\$ 19,812,381.91
Prince Edward Island.....	288,383.09	—	4,691,579.00	4,979,962.09
Nova Scotia.....	88,501.37	—	10,306,585.55	10,395,086.92
New Brunswick.....	1,447,800.14	193,576.71	28,511,718.10	30,153,094.95
Ontario.....	3,565,543.48	299,790.79	71,724,056.32	75,589,390.59
Manitoba.....	887,446.75	17,958.54	15,523,898.97	16,429,304.26
Saskatchewan.....	270,753.29	3,103.38	14,978,604.52	15,252,461.19
Alberta.....	475,943.78	14,975.87	20,068,081.33	20,559,000.98
British Columbia.....	4,051,461.13	838,437.55	62,050,002.62	66,939,901.30
Totals.....	\$ 11,075,833.03	\$ 1,524,288.07	\$ 247,510,463.09	\$ 260,110,584.19

TABLE 6 (a)

Payments by Canada on Account of Additional 40% Contribution from
1 April, 1959 to 31 March, 1960 (Included in Table No. 6)

Newfoundland.....	\$ 1,801,690.26
Prince Edward Island.....	443,550.75
Nova Scotia.....	1,320,682.41
New Brunswick.....	2,284,733.17
Ontario.....	3,683,773.46
Manitoba.....	835,287.05
Saskatchewan.....	13,730.37
Alberta.....	439,265.34
British Columbia.....	3,555,547.18
Totals.....	<hr/> \$14,378,259.99

TABLE 6 (b)

1 April, 1956 to 31 March, 1960 (Included in Table No. 6)

Newfoundland.....	\$ 3,720,651.79
Prince Edward Island.....	803,769.40
Nova Scotia.....	2,539,795.86
New Brunswick.....	7,591,657.42
Ontario.....	8,826,868.76
Manitoba.....	1,852,541.04
Saskatchewan.....	1,835,013.57
Alberta.....	2,894,120.01
British Columbia.....	7,746,670.58
Totals.....	<hr/> \$37,811,088.43

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in the Schedule "A" of each Provincial Agreement may be described as follows:

NEWFOUNDLAND—From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarenville, Port Blandford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry the terminal of the Prince Edward Island-Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—From the New Brunswick-Nova Scotia border to Oxford, thence via Route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycocomagh, Baddeck and Little Bras d'Or to the Newfoundland Ferry Terminal at North Sydney.

NEW BRUNSWICK—From the intersection of provincial highway No. 2 and the Nova Scotia-New Brunswick boundary westerly to Aulac, thence easterly via provincial highway No. 16 to Cape Tormentine to provide a connecting link with the Ferry to Prince Edward Island, again from Aulac via provincial highway No. 2, Sackville, Dorchester, Upper Dorchester, College Bridge and Memramcook to bypass Moncton on the North and return to provincial highway No. 2 near River Glade to Anagance, Penobsquis, and a diversion of the town of Sussex to the junction of highways No. 2 and No. 9; thence along provincial highway No. 9 via Coles Island, Young's Cove, Jemseg, Sheffield and Maugerville to a crossing of the Saint John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2 about two miles west of Fredericton; thence via Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, Meductic, and Woodstock to the junction of provincial highways No. 2 and No. 2B; thence on No. 2B to junction of No. 2 and No. 2B one mile south of Hartland, thence on No. 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent, Kilburn, Perth, Andover, Aroostook, Grand Falls, St. Leonard, Green River, St. Basile, Edmundston, St. Jacques to the intersection of provincial Highway No. 2 with the Quebec boundary.

ONTARIO—Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway No. 7 to Lindsay; from there via highway No. 12 to Orillia and Waubesaushene; then northerly on a new location to MacTier on highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

MANITOBA—From the Ontario boundary to north of East Brainerd, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with highway No. 1 west in the vicinity of St. Charles; thence west via Headingley, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and southwesterly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and southwesterly along the Canadian Pacific Railway line to three miles west of Oak Lake; thence northwesterly and paralleling the railway to the Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sintaluta, Indian Head, McLean, Balgonie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh

ALBERTA—From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, thence northwesterly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River, south of Shouldice Bridge, and thence south of the Bow River to a crossing of the River two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

WESTERN NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park, follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C. Further west in Glacier National Park the route of the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

BRITISH COLUMBIA—From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on Highway No. 1 thence south of Chilliwack to the Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge, by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the North boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT-OF-WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration—deceleration lanes are approved, and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB-BASE, ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL SUPERVISING ENGINEERS DEVELOPMENT ENGINEERING BRANCH HIGHWAYS DIVISION

NEWFOUNDLAND

A. L. Perley,
P.O. Box 4600, Bldg. 29,
Buckmaster's Field,
St. John's Nfld.
Phone: 4171

PRINCE EDWARD ISLAND

H. A. Nason,
Box 1298, Dominion Bldg.
Charlottetown, P.E.I.
Phone: 3814

NOVA SCOTIA

H. F. Peters,
Box 875, Room 717
Ralston Bldg.,
Halifax, N.S.
Phone: 3-9221

NEW BRUNSWICK

H. A. Nason,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: Granite 5-9141

ONTARIO

W. Koropatnick,
225 Jarvis Street,
Toronto 2, Ont.
Phone: EM 2-2711

MANITOBA

J. A. Flatt,
201 Federal Bldg.,
269 Main Street,
Winnipeg, Manitoba.
Phone: WHitehall 3-0601

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.,
Regina, Sask.
Phone: LA 3233

ALBERTA

J. E. Savage,
10225-100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 4-8086

BRITISH COLUMBIA

B. G. Harvey,
P.O. Box 425,
Victoria, B.C.
Phone: 2-5434

WESTERN NATIONAL PARKS

A. H. MacKinnon,
Federal Bldg.,
Banff, Alta.
Phone: 2-3321 or 2-3322

PA1 PW41

A55

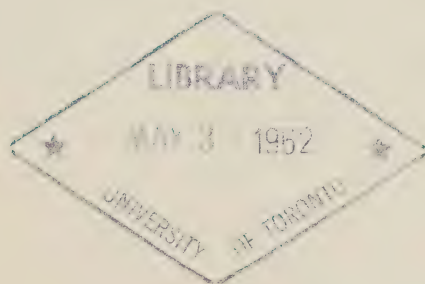


Canada. Public Works, Department of

Department of Public Works

*Annual
Report of proceedings under
the*

TRANS-CANADA HIGHWAY *Act*



**Annual Report for the
fiscal year ended March 31,**

1961



(Winnipeg Free Press photo)

View of the Pembina Overpass and full Cloverleaf at the intersection of PTH #75 and the TCH on the Winnipeg Bypass looking Southwesterly.

DEPARTMENT OF PUBLIC WORKS
Engineering and Construction Division

ANNUAL REPORT
Proceedings Under
THE TRANS-CANADA HIGHWAY ACT

Fiscal Year Ended
MARCH 31, 1961

Issued under the Authority of the
HONOURABLE DAVID J. WALKER
Minister of Public Works
OTTAWA

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1962

Price 25 cents Cat. No. W41-1961

To His Excellency Major-General

GEORGES P. VANIER, D.S.O., M.C., C.D.,

Governor-General and Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1961.

Respectfully submitted,

DAVID J. WALKER

Minister of Public Works.

The Honourable DAVID J. WALKER,
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the twelfth Annual Report of Proceedings Under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1961.

Your obedient servant,

H. A. YOUNG
Deputy Minister.

CONTENTS

	PAGE
TRANS-CANADA HIGHWAY ACT.....	1
GENERAL REVIEW OF 1960.....	2
ADMINISTRATION.....	2
SUMMARY.....	2
Financial.....	2
Labour.....	3
Progress.....	3
TRANS-CANADA HIGHWAY IN NATIONAL PARKS.....	3
HIGHWAY STATISTICS.....	4
Table 1—Mileage, etc.....	4
Table 2—Grading Construction.....	5
Table 3—Paving Construction.....	6
Table 4—Labour Report.....	7
Table 5—Summary of Contractual Commitments.....	8
Table 5(a)—Summary of Commitments for Additional 40%.....	8
Table 6—Summary of Payments to Provincial Governments.....	9
Table 6(a)—Payments by Canada re Additional 40%.....	10
Table 6(b)—Summary of Payments by Canada re Additional 40%.....	10
APPENDICES:	
A—Schedule A—Route of Highway.....	11
B—Schedule B—General Specifications.....	14
C—Federal District Engineers.....	16

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1961

THE TRANS-CANADA HIGHWAY ACT

The construction of the Trans-Canada Highway as a Federal-Provincial project became possible with the passing of the Trans-Canada Highway Act, 1949 Chap. (40) s.I and the execution of the Agreements made thereunder. These Agreements provided for a paved highway across Canada by December 9, 1956. They also provided that Canada would contribute fifty percent of the cost of new construction and up to fifty percent of the cost of construction of sections of the highway built before the Act was passed, where these sections were properly incorporated in the Trans-Canada Highway.

Agreements under the 1949 Act were entered into with all provinces, except Quebec. Canada's total contribution under that Act was limited to \$150,000,000.

Progress during the early years of the Trans-Canada Highway Agreements was slow. Time was required to build up the provincial engineering staffs and most Provinces found it impossible to concentrate the available forces on the construction of the Trans-Canada Highway. An extension of the construction period to December 31, 1960 was accordingly provided for by an Amendment to the Act in 1956. This Amendment also provided for an additional 40 percent contribution by Canada to the cost of construction on one-tenth of the highway mileage in each province. The aggregate limit of the funds available for expenditure by Canada was also increased to \$250,000,000. This limit was increased to \$350,000,000 by a second Amendment to the Act in March 1959.

In 1959 it was again apparent that the completion of the highway would not be possible in some provinces during the construction period provided for in the existing Agreements. A third Amendment of the Act in 1960 extended the construction period to December 31, 1963 and increased the aggregate amount that may be contributed by Canada to \$400,000,000.

The Province of Quebec, which had previously refrained from the construction of the Trans-Canada Highway as a Federal-Provincial project, became party to an Agreement on October 27, 1960. It is now indicated that the construction of the highway in that Province will proceed with the greatest possible speed.

Appendices "A" and "B" of this report contain outlines of Schedules "A" and "B" of the Agreements with the Provinces. Schedule "A" designates the route of the highway within each province and Schedule "B" the general specifications.

General Review of 1960

The estimated cost of the work authorized for construction during the fiscal year 1960-61 was approximately \$61.5 million, which is \$30.1 million less than the amount authorized in the previous fiscal year. This reduction is accounted for by the fact that the construction of the highway is completed, or nearing completion, in the Provinces of Prince Edward Island, Manitoba, Saskatchewan and Alberta.

The construction of the previously reported gap section, between Agawa and Marathon, in the Province of Ontario, has been completed and is open for traffic. The only physical gap that now remains on the entire length of the highway extends through the Rogers Pass section in British Columbia where the terrain presents some of the highway's most difficult construction problems. Every effort is being made to complete the construction of this section at the earliest possible date.

Administration

Responsibility for the design of the highway and its construction rests initially with the provincial governments. The Development Engineering Branch, Department of Public Works, cooperates with provincial authorities in determining the construction costs to which Canada will contribute under the Trans-Canada Highway Agreements. The engineers of the Branch ensure that the conditions of the Agreements are adhered to and inspections are made, in co-operation with provincial engineers, during all phases of construction.

The District Engineers and Inspecting Engineers are located in each province. Their names and office locations are as shown in Appendix "C".

Summary

Financial

From December, 1949 to March 31, 1961, the approved provincial government commitments on contracts for the construction of the Trans-Canada Highway totalled \$619,698,588.66. Commitments during the fiscal year totalled \$61,581,383.21. Canada's share of the 1960-61 commitments is estimated at \$34,980,041.19 of which \$4,189,349.60 represents commitments on account of the additional forty percent contribution made to the cost of construction on ten percent of the highway mileage. Payments to the provinces during the 1960-61 fiscal year totalled \$48,696,480.96.

Labour

Provincial reports show that the construction of the highway provided 1,174,668 man days (8 hours) of employment during the fiscal year. Offsite labour created by the supply of materials and services is estimated at an additional 1,996,936 man days (8 hours).

Progress

The mileage of the highway approved for grading to March 31, 1961 totalled 3,429 of which 3,234 miles were completed. The mileage approved for paving totalled 2,930 of which 2,896 miles were completed. Structures approved for construction totalled 496 of which 445 have been completed.

Trans-Canada Highway in National Parks

Approximately 140 miles of the Trans-Canada Highway lie within the boundaries of various National Parks and, where this is the case, the Department of Public Works is directly responsible for the Highway's construction. By the end of the 1960 building season these portions of the Highway were virtually complete except in Glacier and Revelstoke National Parks where the start of construction was delayed until 1957 pending final agreement on the adoption of the Rogers Pass route.

Terra Nova National Park

During 1960-61 bituminous stabilized base course, which provides a good paved surface, was laid throughout the Park. Only minor work, such as the painting of guide rails, will be required in this Park in 1961-62.

Banff and Yoho National Parks

In both of these Parks the Highway has had a bituminous base course surface for some years, and in the last construction season a final lift of asphaltic concrete pavement was applied to the first 14 miles in Banff National Park. In the next year this final paving will be completed in Banff and will also be applied to the first 16 miles of the route through Yoho National Park.

Glacier and Revelstoke National Parks

Grading in Glacier Park has been carried to the point where this phase of construction will be completed early in the 1961-62 season, while in Revelstoke Park grading has been completed. In Glacier the laying of granular sub-base course commenced in 1960 and the application of bituminous stabilized base course will begin in the following year, so that this section of the highway should be fully open for traffic by the end of 1962. This latter phase was 25 percent completed in Revelstoke last year and a paved surface will be placed throughout the Park in the summer of 1961.

In both Parks all necessary bridges and overpasses are complete and work on the extensive avalanche defenses in Glacier is well underway. The

first of the major snowsheds was 85 percent complete at the end of the year and the following season will see the erection of two more of these structures.

Highway Statistics

The following tables furnish a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1961, and include information pertaining specifically to the fiscal year under review:

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage Under New Agreement

<i>Province</i>	<i>Total Mileage</i>	<i>Approximate Passable Mileage</i>	<i>Paved Mileage (Note¹)</i>
Newfoundland.....	540	540	171
Prince Edward Island.....	71	71	71 ²
Nova Scotia.....	318	318	289
New Brunswick.....	390	390	377
Quebec.....	398	398	300
Ontario.....	1,435	1,453	1,192
Manitoba.....	309	309	304
Saskatchewan.....	406	406	406
Alberta.....	282	282	282
British Columbia.....	568	526 ³	442
National Parks.....	140	105 ⁴	105
Totals.....	4,875	4,798	3,939

¹ Includes mileage on designated route paved prior to December 12, 1949.

² Hillsborough Bridge under construction.

³ Excludes gap section of 42 miles of provincial highway through Rogers Pass Route. During winter months the alternate route via the Big Bend Highway is closed to traffic.

⁴ Excludes gap section of 35 miles through Glacier and Revelstoke National Parks.

Table No. 2—GRADING CONSTRUCTION

1 April, 1960 to 31 March, 1961

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	32	—
Prince Edward Island.....	—	—
Nova Scotia.....	—	1
New Brunswick.....	7	16
Quebec.....	—	—
Ontario.....	64	100
Manitoba.....	—	5
Saskatchewan.....	—	—
Alberta.....	—	1
British Columbia.....	9	33
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	10
Totals.....	112	166

10 December, 1949 to 31 March, 1961

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	407	288
Prince Edward Island.....	71	71
Nova Scotia.....	119	119
New Brunswick.....	197	197
Quebec.....	—	—
Ontario.....	1,021	972
Manitoba.....	250	250
Saskatchewan.....	406	406
Alberta.....	281	281
British Columbia.....	537	510
Terra Nova Park.....	25	25
Banff and Yoho Parks.....	80	80
Glacier and Revelstoke Parks.....	35	35
Totals.....	3,429	3,234

TABLE No. 3—PAVING CONSTRUCTION

1 April, 1960 to 31 March, 1961

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	51	94
Prince Edward Island.....	—	—
Nova Scotia.....	39	60
New Brunswick.....	51	55
Quebec.....	—	—
Ontario.....	189	219
Manitoba.....	3	3
Saskatchewan.....	—	—
Alberta.....	—	3
British Columbia.....	60	64
Terra Nova Park.....	—	25*
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	—
Totals.....	393	523

10 December, 1949 to 31 March, 1961

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	159	157
Prince Edward Island.....	71	71
Nova Scotia.....	119	94
New Brunswick.....	193	188
Quebec.....	—	—
Ontario.....	964	869
Manitoba.....	300	300
Saskatchewan.....	406	406
Alberta.....	281	281
British Columbia.....	437	425
Terra Nova Park.....	—	25*
Banff and Yoho Parks.....	—	80*
Glacier and Revelstoke Parks.....	—	—
Totals.....	2,930	2,896

* Bituminous stabilized base course.

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) "On Site" Work on Trans-Canada Highway
Compiled from Provincial Reports

1 April, 1960 to 31 March, 1961

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	7,313	11,519	75,699	94,531
Prince Edward Island...	774	867	7,648	9,289
Nova Scotia.....	7,511	4,752	41,835	54,098
New Brunswick.....	14,375	5,812	54,195	74,382
Quebec.....	—	—	—	—
Ontario.....	105,079	53,524	297,094	455,697
Manitoba.....	—	472	5,716	6,188
Saskatchewan.....	38	11	114	163
Alberta.....	1,339	926	6,315	8,580
British Columbia.....	49,858	25,672	245,969	321,499
Terra Nova Park.....	11,355	1,917	30,309	43,581
Banff and Yoho Parks..	4,222	702	2,840	7,764
Glacier and Revelstoke Parks.....	30,934	7,164	60,798	98,896
Totals.....	232,798	113,338	828,532	1,174,668

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 1,996,936 for the same period.

10 December, 1949 to 31 March 1961

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	70,314	120,351	692,358	883,023
Prince Edward Island...	30,042	10,898	128,271	169,211
Nova Scotia.....	77,827	45,246	347,304	470,377
New Brunswick.....	106,267	50,297	534,083	690,647
Quebec.....	—	—	—	—
Ontario.....	593,307	553,264	2,814,930	3,961,501
Manitoba.....	61,189	35,496	364,979	461,664
Saskatchewan.....	141,627	91,264	426,466	659,357
Alberta.....	79,141	40,443	325,179	444,763
British Columbia.....	250,017	283,711	1,405,715	1,939,443
Terra Nova Park.....	64,379	16,075	173,591	254,045
Banff and Yoho Parks..	119,528	38,945	268,620	427,093
Glacier and Revelstoke Parks.....	104,379	21,613	194,927	320,919
Totals.....	1,698,017	1,307,603	7,676,423	10,682,043

Note:—The total number of man days (8 hours) of "Off Site" Labour is estimated at 18,159,473 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS

1 April, 1960 to 31 March, 1961

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 8,573,136.56	\$ 5,528,208.28
Prince Edward Island.....	33,846.50	16,923.25
Nova Scotia.....	886,976.38	489,597.15
New Brunswick.....	5,393,482.25	3,023,089.92
Quebec.....	1,215,000.00	607,500.00
Ontario.....	26,321,455.07	14,313,527.53
Manitoba.....	393,882.00	362,851.56
Saskatchewan.....	14,291.25	7,145.62
Alberta.....	24,600.00	20,100.00
British Columbia.....	18,724,713.20	10,611,097.88
Totals.....	\$ 61,581,383.21	\$ 34,980,041.19

10 December, 1949 to 31 March, 1961

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 47,481,577.36	\$ 30,100,504.45
Prince Edward Island.....	9,135,542.28	5,898,166.25
Nova Scotia.....	23,204,900.59	16,506,921.25
New Brunswick.....	53,582,300.76	35,332,145.13
Quebec.....	1,215,000.00	607,500.00
Ontario.....	206,264,684.57	118,401,517.25
Manitoba.....	33,534,583.15	19,241,680.38
Saskatchewan.....	27,852,050.32	15,911,170.17
Alberta.....	37,047,407.57	22,162,905.16
British Columbia.....	180,380,542.06	103,799,130.50
Totals.....	\$619,698,588.66	\$ 367,961,640.54

TABLE No. 5(a)

Summary of Canada's Commitments for additional 40 Percent Contribution from
1 April, 1960 to 31 March, 1961 (Included in Table No. 5)

Newfoundland.....	\$1,241,640.00
Prince Edward Island.....	—
Nova Scotia.....	46,108.96
New Brunswick.....	326,348.80
Quebec.....	—
Ontario.....	1,152,800.00
Manitoba.....	165,910.56
Saskatchewan.....	—
Alberta.....	7,800.00
British Columbia.....	1,248,741.28
Totals.....	\$4,189,349.60

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
1 April, 1960 to 31 March, 1961

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	—	\$ 6,579,175.27	\$ 6,579,175.27
Prince Edward Island.....	—	—	551,094.68	551,094.68
Nova Scotia.....	—	—	3,257,089.47	3,257,089.47
New Brunswick.....	—	—	3,461,086.08	3,461,086.08
Quebec.....	—	—	—	—
Ontario.....	—	—	17,868,568.82	17,868,568.82
Manitoba.....	—	—	542,339.52	542,339.52
Saskatchewan.....	—	—	33,521.56	33,521.56
Alberta.....	—	—	268,230.15	268,230.15
British Columbia.....	—	* — 699.11	16,136,074.52	16,135,375.41
Totals.....	—	* — 699.11	\$ 48,697,180.07	\$ 48,696,480.96

9

10 December, 1949 to 31 March, 1961				
<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 26,235,111.95	\$ 26,391,557.19
Prince Edward Island.....	\$ 288,383.09	—	5,242,673.68	5,531,056.77
Nova Scotia.....	88,501.37	—	13,563,675.02	13,652,176.39
New Brunswick.....	1,447,800.14	193,576.71	31,972,804.18	33,614,181.03
Quebec.....	—	—	—	—
Ontario.....	3,565,543.48	299,790.79	89,592,625.14	93,457,959.41
Manitoba.....	887,446.75	17,958.54	16,066,238.49	16,971,643.78
Saskatchewan.....	270,753.29	3,103.38	15,012,126.08	15,285,982.75
Alberta.....	475,943.78	14,975.87	20,336,311.48	20,827,231.13
British Columbia.....	4,051,461.13	837,738.44	78,186,077.14	83,075,276.71
Totals.....	\$11,075,833.03	\$1,523,588.96	\$296,207,643.16	\$308,807,065.15

* Represents refund of contributions made on account of a section of highway which has been abandoned in favour of a new location.

TABLE No. 6 (a)

Payments by Canada on Account of Additional 40% Contribution from
1 April, 1960 to 31 March, 1961 (Included in Table No. 6)

Newfoundland.....	\$ 2,110,338.36
Prince Edward Island.....	244,930.97
Nova Scotia.....	1,235,240.06
New Brunswick.....	489,266.65
Quebec.....	—
Ontario.....	3,375,791.34
Manitoba.....	241,039.79
Saskatchewan.....	168.42
Alberta.....	118,964.43
British Columbia.....	3,541,073.28
Totals.....	<u>\$11,356,813.30</u>

TABLE No. 6 (b)

1 April, 1956 to 31 March, 1961 (Included in Table No. 6)

Newfoundland.....	\$ 5,830,990.15
Prince Edward Island.....	1,048,700.37
Nova Scotia.....	3,775,035.92
New Brunswick.....	8,080,924.07
Quebec.....	—
Ontario.....	12,202,660.10
Manitoba.....	2,093,580.83
Saskatchewan.....	1,835,181.99
Alberta.....	3,013,084.44
British Columbia.....	11,287,743.86
	<u>\$49,167,901.73</u>

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in the Schedule "A" of each Provincial Agreement may be described as follows:

NEWFOUNDLAND—From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarenville, Port Blanford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry the terminal of the Prince Edward Island-Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—From the New Brunswick-Nova Scotia border to Oxford, thence via Route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycocomagh, Baddeck and Little Bras d'Or to the Newfoundland Ferry Terminal at North Sydney.

NEW BRUNSWICK—From the intersection of provincial highway No. 2 and the Nova Scotia-New Brunswick boundary westerly to Aulac, thence easterly via provincial highway No. 16 to Cape Tormentine to provide a connecting link with the Ferry to Prince Edward Island, again from Aulac via provincial highway No. 2, Sackville, Dorchester, Upper Dorchester, College Bridge and Memramcook to bypass Moncton on the North and return to provincial highway No. 2 near River Glade to Anagance, Penobsquis, and a diversion of the town of Sussex to the junction of highways No. 2 and No. 9; thence along provincial highway No. 9 via Coles Island, Young's Cove, Jemseg, Sheffield and Maugerville to a crossing of the Saint John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2 about two miles west of Fredericton; thence via Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, Meductic, and Woodstock to the junction of provincial highways No. 2 and No. 2B; thence on No. 2B to junction of No. 2 and No. 2B one mile south of Hartland, thence on No. 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent, Kilburn, Perth, Andover, Aroostook, Grand Falls, St. Leonard, Green River, St. Basile, Edmundston, St. Jacques to the intersection of provincial Highway No. 2 with the Quebec boundary.

QUEBEC—Commencing where highway number 2 intersects the boundary between Quebec and New Brunswick; thence northwesterly along the general location of highway number two to the

vicinity of Riviere du Loup; thence southwesterly along the general location of highway number 2 passing in the vicinity of Ste-Anne-de-la-Pocatiere, Montmagny, to a point south-east of Lauzon; thence by a new diversion south of Levis to a crossing of the Chaudiere River near Charny; thence southwesterly along the general location of highway number nine passing in the vicinity of Drummondville to a point north-east of St-Hyacinthe; thence westerly by a new location to a crossing of the St. Lawrence River over Boucherville Islands and to a junction with Metropolitan Boulevard; thence southwesterly through Montreal Island to a crossing of Vaudreuil Bay over Ile aux Tourtres to a junction with a relocation of number 17 highway; thence along the general location of highway number 17 to intersect the boundary between Quebec and Ontario.

ONTARIO—Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway number 7 to Lindsay; from there via highway No. 12 to Orillia and Waubaushe; then northerly on a new location to MacTier on Highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

MANITOBA—From the Ontario boundary to north of East Brintree, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with Highway No. 1 west in the vicinity of St. Charles; thence west via Headingley, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and southwesterly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and southwesterly along the Canadian Pacific Railway line to three miles west of Oak Lake; thence northwesterly and paralleling the railway to the Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sintaluta, Indian Head, McLean, Balgonie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh.

ALBERTA—From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, thence north-westerly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River, south of Shouldice Bridge, and thence south of the Bow River to a crossing of the River two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

WESTERN NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C. Further west in Glacier National Park the route of the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

BRITISH COLUMBIA—From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on Highway No. 1 thence south of Chilliwack to the Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge, by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the North boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT-OF WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration—deceleration lanes are approved, and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB-BASE, ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL DISTRICT ENGINEERS
DEVELOPMENT ENGINEERING BRANCH
ENGINEERING AND CONSTRUCTION DIVISION

NEWFOUNDLAND

A. L. Perley,
P.O. Box 4600, Bldg. 29,
Buckmaster's Field,
St. John's, Nfld.
Phone: 4171

PRINCE EDWARD ISLAND

H. A. Nason,
Box 1268, Dominion Bldg.
Charlottetown, P.E.I.
Phone: 894-3814

NOVA SCOTIA

H. F. Peters,
Box 875, Room 717
Ralston Bldg.,
Halifax, N.S.
Phone: 423-9221

NEW BRUNSWICK

H. A. Nason,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: Granite 5-9141

QUEBEC

J. C. Beauchamp,
72 Blvd. des Capucins,
Quebec, P.Q.
Phone: LA-9-2781

ONTARIO

W. Koropatnick,
225 Jarvis Street,
Toronto 2, Ont.
Phone: EM 2-2711

MANITOBA

J. A. Flatt,
201 Federal Bldg.,
269 Main Street,
Winnipeg, Manitoba.
Phone: Whitehall 3-0601

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.,
Regina, Sask.
Phone: LA 3233

ALBERTA

J. E. Savage,
10225-100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 4-8086

BRITISH COLUMBIA

B. G. Harvey,
Room 211,
816 Government St.,
Victoria, B.C.
Phone: 2-5434

WESTERN NATIONAL PARKS

A. H. MacKinnon,
Federal Bldg.,
Banff, Alta.
Phone: 2-3321 or 2-3322

71 PW 41

A55



Canada.

Department of Public Works,

Annual

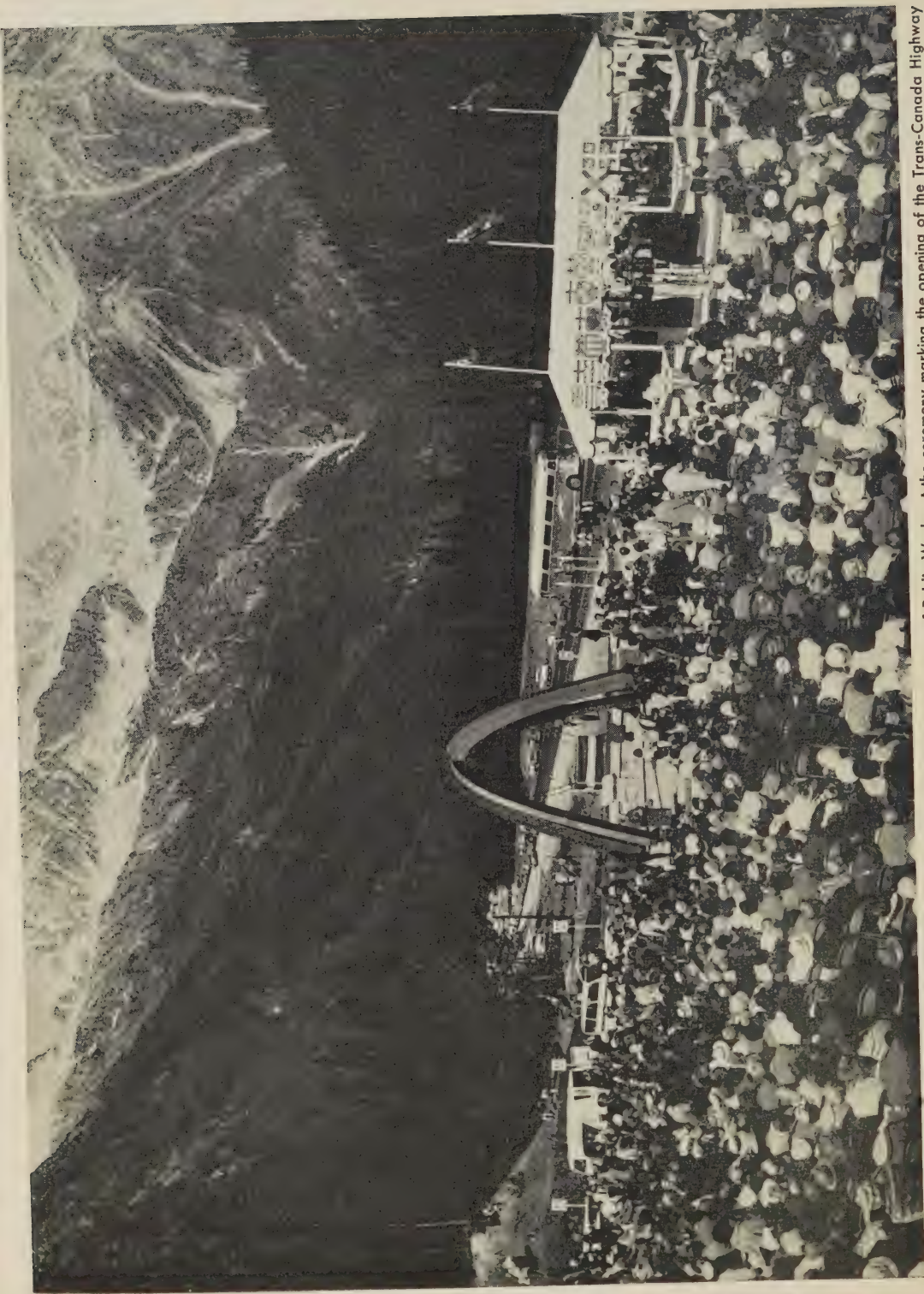
Report of proceedings under the

TRANS-CANADA HIGHWAY *Act*



Annual Report for the
fiscal year ended March 31,

1962



A section of the huge crowd listening to the address of the Hon. E. Davie Fulton Minister of Public Works at the ceremony marking the opening of the Trans-Canada Highway at Rogers Pass, B.C.

DEPARTMENT OF PUBLIC WORKS
Development Engineering Branch

ANNUAL REPORT
Proceedings Under
THE TRANS-CANADA HIGHWAY ACT

Fiscal Year Ended
MARCH 31, 1962

Issued under the Authority of the
HONOURABLE JEAN-PAUL DESCHATELETS
Minister of Public Works
OTTAWA

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1963

Price 25 cents

Cat. No. W41-1962

To His Excellency Major-General

GEORGES P. VANIER, D.S.O., M.C., C.D.,

Governor-General and Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1962.

Respectfully submitted,

JEAN-PAUL DESCHATELETS

Minister of Public Works.

The Honourable Jean-Paul Deschatelets
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the thirteenth Annual Report of Proceedings Under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1962.

Your obedient servant,

G. B. WILLIAMS

Acting Deputy Minister.

CONTENTS

	PAGE
TRANS-CANADA HIGHWAY ACT.....	1
GENERAL REVIEW.....	2
ADMINISTRATION.....	3
SUMMARY	
Financial.....	3
Labour.....	4
Progress.....	4
TRANS-CANADA HIGHWAY IN NATIONAL PARKS.....	4
HIGHWAY STATISTICS	
Table 1—Mileage, etc.....	6
Table 2—Grading Construction.....	6
Table 3—Paving Construction.....	7
Table 4—Labour Report.....	8
Table 5—Summary of Contractual Commitments.....	9
Table 5(a)—Summary of Commitments for Additional 40%.....	10
Table 6—Summary of Payments to Provincial Governments.....	11
Table 6(a)—Payments by Canada re Additional 40%.....	12
Table 6(b)—Summary of Payments by Canada re Additional 40%.....	12
APPENDICES:	
A—Schedule A—Route of Highway.....	13
B—Schedule B—General Specifications.....	16
C—Federal District Engineers.....	18

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1962

THE TRANS-CANADA HIGHWAY ACT

Construction of the Highway was begun in 1950 under the authority of the Trans-Canada Highway Act 1949 (2nd Sess.), C. 40, S.1, which authorized the Minister responsible to enter into agreements with the provinces of Canada providing for the construction of the Highway through each province, and for contributions by the Government of Canada toward the cost. These agreements also establish the location of the Highway in each province, fix the minimum standards of construction, and set out the terms and conditions governing:

- (a) the calling for tenders and the review of tenders and contract documents
- (b) the inspection of the highway during construction
- (c) the method of determining the costs of construction
- (d) the amount of the contribution
- (e) the examination and audit of all construction costs and accounts, and
- (f) such other terms and conditions as may be considered necessary or desirable.

Agreements under the 1949 Act were entered into with all provinces except Quebec. These Agreements provided, as did the Act, for a paved highway across Canada by December 9, 1956. They also provided that Canada would contribute 50 per cent of the cost of new construction and up to 50 per cent of the cost of previously constructed sections of the highway where these sections were properly incorporated in the Trans-Canada Highway. Canada's total contribution under the Act was limited to \$150 million.

The Act also provided that the Minister might, out of moneys appropriated by Parliament, provide for the construction of such highways within the National Parks as form part of a Trans-Canada Highway.

In the early stages of the project the provinces experienced many problems because of the enlargement of their usual construction programs. Work began slowly in 1950 and most provinces found it impossible to provide in their yearly programs for the work necessary to ensure the completion of the Highway within the seven-year period covered by the Act. It

was to discuss this uncompleted mileage that a Federal-Provincial Highway Conference was called in November, 1955. This resulted in the introduction of, and the passing by Parliament of an amended act in June 1956. This amendment by Parliament increased the extent of Canada's contribution to the cost of the Highway by providing for an additional forty per cent contribution to the cost of construction for one-tenth of the Highway mileage in each province. The construction period was extended to the 31st day of December, 1960, and the aggregate limit of the funds available for expenditure by Canada was increased to \$250 million.

The amendment of the Act resulted in the execution of new Agreements with each of the participating provinces. The Agreements provided that by the 31st day of December, 1960, the highway shall be completed in conformity with the general specifications of Schedule "B", or that it shall constitute a good standard of paved highway. This provision eliminated the necessity of a Province reconstructing sections of the highway which were already paved to a satisfactory provincial standard and made it possible to speed up the work on those sections where reconstruction and paving was most essential.

A second amendment to the Trans-Canada Highway Act received Royal Assent on the 20th of March 1959. This amendment provided for an increase of \$100 million in the amount of the Federal contribution to the cost of constructing the Highway. This increased the aggregate limit of the funds available for expenditure by Canada, under the Act and the Amendments, to \$350 million.

In 1960 it was again apparent that the completion of the Highway would not be possible in some provinces during the construction period provided for in the existing Agreements. A third Amendment of the Act in May 1960, extended the construction period to December 31, 1963 and increased the aggregate amount that may be contributed by Canada to \$400 million.

The Province of Quebec, which had previously refrained from the construction of the Trans-Canada Highway as a Federal-Provincial project became party to an Agreement on October 27, 1960.

Appendices "A" and "B" of the report contain outlines of Schedules "A" and "B" of the Agreements with the provinces. Schedule "A" designates the route of the Highway within each province and Schedule "B" the general specifications.

General Review

The construction of the Highway has been completed or is nearing completion in the Provinces of Prince Edward Island, Manitoba, Saskatchewan and Alberta.

Considerable construction still remains to be done in the Province of Newfoundland. There appears to be little possibility of construction being completed on the entire Newfoundland mileage before the end of the construction period provided for in the present Agreements.

In the Provinces of Nova Scotia and New Brunswick there is a considerable mileage of the Highway that has previously been paved to a satisfactory provincial standard. This, together with the construction now being undertaken each year, may enable these Provinces to ensure completion of a suitable paved highway through their sections before the end of the construction period provided for in the Agreements.

The Province of Quebec has made an auspicious start on the construction of its section of the Highway. Continuation of the work on a large scale during the 1962 and 1963 construction seasons will insure the completion of a high percentage of the Highway mileage during these years. It is, however, unlikely that the construction of the entire mileage across the Province can be completed before the termination date of the Agreement.

The Province of Ontario is continuing with the work of reconstructing substandard sections of the Highway. Although it appears unlikely that all substandard sections will be upgraded before December 31, 1963, there will be a continuous paved highway across the Province by that date.

The construction of the Rogers Pass section of the Highway will be completed during the 1962 construction season. The entire mileage of the Highway through British Columbia will then be open for traffic. Construction in this Province should all be completed before the expiration of the present Agreement.

Administration

Responsibility for the design of the Highway rests initially with the provincial governments. Cooperation between the provincial authorities and the Development Engineering Branch, Department of Public Works ensures the construction of the Highway in accordance with the requirements of the Trans-Canada Highway Agreements. The engineers of the Branch ensure that the conditions of the Agreement are adhered to and inspections are made, in cooperation with provincial engineers, during all phases of construction.

District Engineers and Inspecting Engineers are located in the various provinces. Their names and office locations are as shown in Appendix "C".

Summary

Financial

From December 1949 to March 31, 1962 the approved provincial government commitments on contracts for the construction of the Trans-Canada Highway totalled \$690,393,521.06. Commitments during the fiscal

year totalled \$70,694,932.40. Canada's share of the 1961-62 commitments is estimated at \$40,734,128.08 of which \$5,386,661.88 represents commitments on account of the additional forty per cent contribution made to the cost of construction on ten per cent of the highway mileage. Payments to the provinces during the fiscal year totalled \$36,483,617.83.

Labour

Provincial reports show that the construction of the Highway provided 742,614 man days (8 hours) of employment during the fiscal year. Offsite labour created by the supply of materials and services is estimated at an additional 1,262,444 man days (8 hours). The total estimated man days of on site employment provided by the construction of the Highway to date is estimated at 11,424,657.

Progress

The mileage of the Highway approved for grading to March 31, 1962 totals 3,628 of which 3,392 miles were completed. The mileage approved for paving totalled 3,140, of which 3,096 miles were completed. Structures approved for construction totalled 572 of which 480 have been completed.

The varying terrain and changing soil conditions along the route of the Highway through the ten provinces of Canada has presented a continuous but ever changing challenge to the ingenuity, skill and resourcefulness of the engineers and contractors charged with the design and construction of the Highway. Its construction has required the use of practically every type of highway and bridge construction equipment. In the National Parks sections of the Highway alone the problems varied from the excavation of great depths of muskeg in parts of the Terra Nova National Park, Newfoundland, to the cutting back of mountain faces and the construction of tunnels and bridges in the mountain passes of British Columbia. The frequent occurrence, and the magnitude of snow avalanches along the proposed route of the Highway through a thirty-five mile section between the eastern boundary of Glacier National Park and Albert Canyon made it necessary, for the first time in Canadian highway history, to plan for and construct the avalanche defence works necessary to protect the motorists using the route.

Trans-Canada Highway in National Parks

Approximately 140 miles of the Trans-Canada Highway lie within the boundaries of the various National Parks and where this is the case, the Department of Public Works is directly responsible for the Highway's construction.

By the end of the 1961 construction season, the Highway in the Parks had a bituminous surface throughout, except in Glacier and Revelstoke National Parks where the start of the construction season had been delayed pending final agreement on the Rogers Pass route.

Consequently, construction in 1961-62 was limited in all Parks except Revelstoke and Glacier to placing a final lift of paving where required and the necessary sign posting, seeding etc. The situation in each National Park is as follows:

Terra Nova National Park

During 1960-61 bituminous stabilized base course, which provides a good paved surface, was laid throughout the Park. Under existing traffic densities a further paving lift is considered unnecessary for some years.

In 1961-62 work was confined to the completion of sign posting, guide fence installation, slope seeding and final clean-up.

Banff and Yoho National Parks

In both these Parks the Highway has had a bituminous base course surface for some years.

In 1960-61 the first fourteen miles in Banff National Park were given a final lift of paving and work on the remaining 37.3 miles was undertaken in 1961-62.

At the close of the construction season, approximately 19 miles remained for completion in 1962-63.

In Yoho final paving was applied to the first 16 miles and the remaining 13 miles will be completed in 1962-63.

Glacier and Revelstoke National Parks

In Glacier National Park the close of the 1961-62 construction season saw the first lift of bituminous stabilized base course applied to all but some 4.4 miles of the 27.3 miles through the Park, with completion of the second lift scheduled for 1962-63. In the very deep fills which are necessary in mountainous areas as this, some degree of settlement is difficult to avoid. Final paving will be delayed until it can be established that the grade has reached final consolidation.

The first phase of construction of avalanche defences is scheduled for completion before the winter of 1962-63. This consists of the construction of 5 snowsheds totalling 2700' in length, mound defences at 9 sites, diversion dams at 5 sites totalling 2200' in length.

Of the above, all have been completed except for 2 snowsheds, one 450' and the other 1,050' in length. Specifications and contract documents have been prepared for the latter which are scheduled for constructing during the spring and summer of 1962.

Highway Statistics

The following tables furnish a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1962, and include information pertaining specifically to the fiscal year under review.

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage Under
New Agreement

<i>Province</i>	<i>Total Mileage</i>	<i>Approximate Passable Mileage</i>	<i>Paved Mileage (Note ¹)</i>
Newfoundland.....	540	540	182
Prince Edward Island.....	71	71	71
Nova Scotia.....	318	318	302
New Brunswick.....	390	390	361
Quebec.....	398	398	296
Ontario.....	1,453	1,453	1,259
Manitoba.....	309	309	307
Saskatchewan.....	406	406	406
Alberta.....	282	282	282
British Columbia.....	552 ³	510 ²	489
National Parks.....	140	105 ⁴	105
Total.....	4,859	4,782	4,060

¹ Includes mileage on designated route paved prior to December 12, 1949.

² Excludes gap section of 42 miles of provincial highway through Rogers Pass Route. During winter months the alternate route via Big Bend Highway is closed to traffic.

³ Reduction from 568 to 552 miles is due to revisions in project mileages.

⁴ Excludes gap section of 35 miles through Glacier and Revelstoke National Parks.

TABLE No. 2—GRADING CONSTRUCTION

1 April, 1961 to 31 March, 1962

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	—	20
Prince Edward Island.....	—	—
Nova Scotia.....	9	—
New Brunswick.....	25	19
Quebec.....	97	19
Ontario.....	63	68
Manitoba.....	—	—
Saskatchewan.....	—	—
Alberta.....	—	—
British Columbia.....	5	32
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	—
Totals.....	199	158

10 December, 1949 to 31 March, 1962

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	407	308
Prince Edward Island.....	71	71
Nova Scotia.....	128	119
New Brunswick.....	222	216
Quebec.....	97	19
Ontario.....	1,084	1,040
Manitoba.....	250	250
Saskatchewan.....	406	406
Alberta.....	281	281
British Columbia.....	542	542
Terra Nova Park.....	25	25
Banff and Yoho Parks.....	80	80
Glacier and Revelstoke Parks.....	35	35
Totals.....	3,628	3,392

TABLE No. 3—PAVING CONSTRUCTION

1 April, 1961 to 31 March, 1962

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	13	11
Prince Edward Island.....	—	—
Nova Scotia.....	—	25
New Brunswick.....	14	14
Quebec.....	12	—
Ontario.....	42	115
Manitoba.....	7	6
Saskatchewan.....	—	—
Alberta.....	—	—
British Columbia.....	17	29
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	—
Totals.....	105	200

10 December, 1949 to 31 March, 1962

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	172	168
Prince Edward Island.....	71	71
Nova Scotia.....	119	119
New Brunswick.....	207	202
Quebec.....	12	—
Ontario.....	1,006	984
Manitoba.....	307	306
Saskatchewan.....	406	406
Alberta.....	281	281
British Columbia.....	454	454
Terra Nova Park.....	25*	25*
Banff and Yoho Parks.....	80*	80*
Glacier and Revelstoke Parks.....	—	—
Totals.....	3,140	3,096

* Bituminous Stabilized Base Course.

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) "On Site" Work on Trans-Canada Highway

1 April, 1961 to 31 March, 1962

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	2,656	2,383	19,334	24,373
Prince Edward Island..	493	513	5,150	6,156
Nova Scotia.....	5,299	1,963	18,213	25,475
New Brunswick.....	12,682	7,083	60,811	80,576
Quebec.....	5,152	3,997	6,358	15,507
Ontario.....	66,162	29,307	189,545	285,014
Manitoba.....	—	77	1,506	1,583
Saskatchewan.....	1,451	304	3,427	5,182
Alberta.....	—	—	—	—
British Columbia.....	37,187	18,379	173,975	229,541
Terra Nova Park.....	2,147	116	495	2,758
Banff and Yoho Parks..	9,016	2,354	8,332	19,702
Glacier and Revelstoke Parks.....	16,900	3,005	26,842	46,747
Total.....	159,145	69,481	513,988	742,614

Note: The total number of man days (8 hours) of "Off Site" Labour is estimated at 1,262,444 for the same period.

10 December, 1949 to 31 March, 1962

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	72,970	122,734	711,692	907,396
Prince Edward Island..	30,535	11,411	133,421	175,367
Nova Scotia.....	83,126	47,209	365,517	495,852
New Brunswick.....	118,949	57,380	594,894	771,223
Quebec.....	5,152	3,997	6,358	15,507
Ontario.....	659,469	582,571	3,004,475	4,246,515
Manitoba.....	61,189	35,573	366,485	463,247
Saskatchewan.....	143,078	91,568	429,893	664,539
Alberta.....	79,141	40,443	325,179	444,763
British Columbia.....	287,204	302,090	1,579,690	2,168,984
Terra Nova Park.....	66,526	16,191	174,086	256,803
Banff and Yoho Parks..	128,544	41,299	276,952	446,795
Glacier and Revelstoke Parks.....	121,279	24,618	221,769	367,666
Total.....	1,857,162	1,377,084	8,190,411	11,424,657

Note: The total number of man days (8 hours) of "Off Site" Labour is estimated at 19,421,917 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS
1 April, 1961 to 31 March, 1962

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 1,409,322.16	\$ 723,861.07
Prince Edward Island.....	210,740.00	189,666.00
Nova Scotia.....	957,007.55	586,693.42
New Brunswick.....	4,641,335.29	2,413,867.64
Quebec.....	35,046,700.52	20,642,823.01
Ontario.....	8,532,369.79	4,399,068.97
Manitoba.....	1,293,442.12	1,198,213.06
Saskatchewan.....	367,800.00	183,900.00
Alberta.....	51,100.00	45,990.00
British Columbia.....	18,185,114.97	10,350,044.91
Totals.....	\$70,694,932.40	\$40,734,128.08

10 December, 1949 to 31 March, 1962

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 48,890,899.52	\$ 30,824,365.52
Prince Edward Island.....	9,346,282.28	6,087,832.25
Nova Scotia.....	24,161,908.14	17,093,614.67
New Brunswick.....	58,223,636.05	37,746,012.77
Quebec.....	36,261,700.52	21,250,323.01
Ontario.....	214,797,054.36	122,800,586.22
Manitoba.....	34,828,025.27	20,439,893.44
Saskatchewan.....	28,219,850.32	16,095,070.17
Alberta.....	37,098,507.57	22,208,895.16
British Columbia.....	198,565,657.03	114,149,175.41
Totals.....	\$690,393,521.06	\$408,695,768.62

TABLE No. 5(a)

Summary of Canada's Commitments for additional 40 Percent Contribution from
1 April 1961 to 31 March, 1962 (Included in Table No. 5)

Newfoundland.....	\$ 19,200.00
Prince Edward Island.....	84,296.00
Nova Scotia.....	108,189.65
New Brunswick.....	93,200.00
Quebec.....	3,119,472.75
Ontario.....	132,884.07
Manitoba.....	551,492.00
Saskatchewan.....	—
Alberta.....	20,440.00
British Columbia.....	1,257,487.41
Total.....	\$5,386,661.88

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
1 April, 1961 to 31 March, 1962

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	—	\$ 2,238,870.15	\$ 2,238,870.15
Prince Edward Island.....	—	—	299,900.40	299,900.40
Nova Scotia.....	—	—	1,767,817.76	1,767,817.76
New Brunswick.....	—	—	2,357,075.86	2,357,075.86
Quebec.....	—	—	2,702,726.14	2,702,726.14
Ontario.....	—	—	13,003,666.95	13,003,666.95
Manitoba.....	—	—	857,335.44	857,335.44
Saskatchewan.....	—	—	70,971.63	70,971.63
Alberta.....	—	—	654,593.58	654,593.58
British Columbia.....	—\$61,786.47	—\$53,192.69	12,645,638.88	12,530,659.72
Totals.....	—\$61,786.47	—\$53,192.69	\$36,598,596.79	\$36,483,617.63

10 December, 1949 to 31 March, 1962

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 28,473,982.10	\$ 28,630,427.33
Prince Edward Island.....	\$ 288,383.09	—	5,542,574.08	5,830,957.17
Nova Scotia.....	88,501.37	—	15,331,492.78	15,419,994.15
New Brunswick.....	1,447,800.14	193,576.71	34,329,880.04	35,971,256.89
Quebec.....	—	—	2,702,726.14	2,702,726.14
Ontario.....	3,565,543.48	299,790.79	102,596,292.09	106,461,626.36
Manitoba.....	887,446.75	17,958.54	16,923,573.93	17,828,979.22
Saskatchewan.....	270,753.29	3,103.38	15,083,097.71	15,356,954.38
Alberta.....	475,943.78	14,975.87	20,990,905.06	21,481,824.71
British Columbia.....	3,989,674.66	784,545.75	90,831,716.02	95,605,936.43
Totals.....	\$11,014,046.56	\$1,470,396.27	\$332,806,239.95	\$345,290,682.78

TABLE No. 6 (a)

Payments by Canada on Account of Additional 40% Contribution from
1 April, 1961 to 31 March, 1962 (Included in Table No. 6)

Newfoundland.....	\$ 356,665.76
Prince Edward Island.....	133,289.07
Nova Scotia.....	553,506.58
New Brunswick.....	68,479.64
Quebec.....	—
Ontario.....	643,069.81
Manitoba.....	476,657.88
Saskatchewan.....	—
Alberta.....	275,316.09
British Columbia.....	2,049,216.64
Total.....	<hr/> \$ 4,556,201.47

TABLE No. 6 (b)

1 April, 1956 to 31 March, 1962 (Included in Table No. 6)

Newfoundland.....	\$ 6,187,655.91
Prince Edward Island.....	1,181,989.44
Nova Scotia.....	4,328,542.50
New Brunswick.....	8,149,403.71
Quebec.....	—
Ontario.....	12,845,729.91
Manitoba.....	2,570,238.71
Saskatchewan.....	1,835,181.99
Alberta.....	3,288,400.53
British Columbia.....	13,336,960.50
Total.....	<hr/> \$53,724,103.20

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in Schedule "A" of each Provincial Agreement may be described as follows:

NEWFOUNDLAND—From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarenville, Port Blandford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry the terminal of the Prince Edward Island-Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tyron, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—From the New Brunswick-Nova Scotia border to Oxford, thence via Route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycocomagh, Baddeck and Little Bras d'Or to the Newfoundland Ferry Terminal at North Sydney.

NEW BRUNSWICK—From the intersection of provincial highway No. 2 and the Nova Scotia-New Brunswick boundary westerly to Aulac, thence easterly via provincial highway No. 16 to Cape Tormentine to provide a connecting link with the Ferry to Prince Edward Island, again from Aulac via provincial highway No. 2, Sackville, Dorchester, Upper Dorchester, College Bridge and Memramcook to bypass Moncton on the North and return to provincial highway No. 2 near River Glade to Anagance, Penobsquis, and a diversion of the town of Sussex to the junction of highways No. 2 and No. 9; thence along provincial highway No. 9 via Coles Island, Young's Cove, Jemseg, Sheffield and Maugerville to a crossing of the Saint John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2 about two miles west of Fredericton; thence via Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, Meductic, and Woodstock to the junction of provincial highways No. 2 and No. 2B; thence on No. 2B to junction of No. 2 and No. 2B one mile south of Hartland, thence on No. 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent, Kilburn, Perth, Andover, Aroostook, Grand Falls, St. Leonard, Green River, St. Basile, Edmundston, St. Jacques to the intersection of provincial Highway No. 2 with the Quebec boundary.

QUEBEC—Commencing where highway No. 2 intersects the boundary between Quebec and New Brunswick; thence northwesterly along the general location of highway No. 2 to the vicinity of Riviere du Loup; thence southwesterly along the general location of highway No. 2 passing in the vicinity of Ste-Anne-de-la-Pocatiere, Montmagny, to a point southeast of Lauzon; thence by a new diversion south of Levis to a crossing of the Chaudiere River near Charny; thence southwesterly along the general location of highway No. 9 passing in the vicinity of Drummondville to a point northeast of St-Hyacinthe; thence westerly by a new location to a crossing of the St. Lawrence River over Boucherville Islands and to a junction with Metropolitan Boulevard; thence southwesterly through Montreal Island to a crossing of Vaudreuil Bay over Ile aux Tourtres to a junction with a relocation of highway No. 17; thence along the general location of highway No. 17 to intersect the boundary between Quebec and Ontario.

ONTARIO—Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway No. 7 to Lindsay; from there via highway No. 12 to Orillia and Waubaushene; then northerly on a new location to MacTier on Highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via highway No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

MANITOBA—From the Ontario boundary to north of East Braintree, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with highway No. 1 west in the vicinity of St. Charles; thence west via Headingley, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and southwesterly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and southwesterly along the Canadian Pacific Railway line to three miles west of Oak Lake; thence northwesterly and paralleling the railway to the Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sintaluta, Indian Head, McLean, Balgonie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift

Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh.

ALBERTA—From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, thence north-westerly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River, south of Shouldice Bridge, and thence south of the Bow River to a crossing of the River two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

WESTERN NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C. Further west in Glacier National Park the route of the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

BRITISH COLUMBIA—From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on highway No. 1 thence south of Chilliwack to the Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge, by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the North boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT-OF-WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration—deceleration lanes are approved, and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB-BASE, ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL DISTRICT ENGINEERS DEVELOPMENT ENGINEERING BRANCH ENGINEERING AND CONSTRUCTION DIVISION

NEWFOUNDLAND

A. L. Perley,
P.O. Box 4600, Bldg. 29,
Buckmaster's Field,
St. John's, Nfld.
Phone: 4171

PRINCE EDWARD ISLAND

H. A. Nason,
Box 1268, Dominion Bldg.,
Charlottetown, P.E.I.
Phone: 894-3814

NOVA SCOTIA

H. F. Peters,
Box 875, Room 717,
Ralston Bldg.,
Halifax, N.S.
Phone: 423-9221

NEW BRUNSWICK

H. A. Nason,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: Granite 5-9141

QUEBEC

J. C. Beauchamp,
Champlain Harbour Station,
Wolfe's Cove,
Quebec 2, P.Q.
Phone: 529-2981

ONTARIO

W. Koropatnick,
225 Jarvis Street,
Toronto 2, Ont.
Phone: EM 2-2711

MANITOBA

J. A. Flatt,
201 Federal Bldg.,
269 Main Street,
Winnipeg, Man.
Phone: Whitehall 3-0601

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.,
Regina, Sask.
Phone: LA 3233

ALBERTA

J. E. Savage,
10225-100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 4-8086

BRITISH COLUMBIA

B. G. Harvey,
Room 211,
816 Government St.,
Victoria, B.C.
Phone: 2-5434

WESTERN NATIONAL PARKS

A. H. MacKinnon,
Federal Bldg.,
Banff, Alta.
Phone: 2-3321 or 2-3322

A55



Canada.

Department of Public Works

Annual

Report of proceedings under the

TRANS-CANADA HIGHWAY Act



**Annual Report for the
fiscal year ended March 31,**

1963



Spectacular rock cuts such as this are common on the Trans-Canada Highway north of Lake Superior

DEPARTMENT OF PUBLIC WORKS
Development Engineering Branch

ANNUAL REPORT

Proceedings Under

THE TRANS-CANADA HIGHWAY ACT

Fiscal Year Ended

MARCH 31, 1963

Issued under the Authority of the
HONOURABLE JEAN-PAUL DESCHATELETS
Minister of Public Works
OTTAWA

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, 1964

Price 25 cents

Cat. No. W41-1963

To His Excellency Major-General

GEORGES P. VANIER, D.S.O., M.C., C.D.,

Governor-General and Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1963.

Respectfully submitted,

JEAN-PAUL DESCHATELETS

Minister of Public Works.

The Honourable Jean-Paul Deschatelets
Minister of Public Works,
OTTAWA.

Sir:

I have the honour to submit the fourteenth Annual Report of Proceedings Under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1963.

Your obedient servant,

LUCIEN LALONDE

Deputy Minister

CONTENTS

	PAGE
CONSTRUCTION PROGRESS.....	1
TRANS-CANADA HIGHWAY IN NATIONAL PARKS.....	2
THE TRANS-CANADA HIGHWAY ACT.....	2
HIGHWAY STATISTICS	
Table 1—Mileage, etc.....	4
Table 2—Grading Construction.....	4
Table 3—Paving Construction.....	5
Table 4—Labour Report.....	6
Table 5—Summary of Contractual Commitments.....	7
Table 5(a)—Summary of Commitments for Additional 40%.....	8
Table 6—Summary of Payments to Provincial Governments.....	9
Table 6(a)—Payments by Canada re Additional 40%.....	10
Table 6(b)—Summary of Payments by Canada re Additional 40%.....	10
APPENDICES	
A—Schedule A—Route of Highway.....	11
B—Schedule B—General Specifications.....	14
C—Federal District Engineers.....	16

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1963

CONSTRUCTION PROGRESS

Good progress was made during the year under review in the construction of the Trans-Canada Highway. This was true of the sections through the National Parks which are entirely a Federal responsibility as well as of those parts of the route where construction is carried out by the provinces.

This progress was highlighted on September 3, 1962, by a ceremony held in Rogers Pass in Glacier National Park marking the opening of this section which was the last major gap in the route. The opening of Rogers Pass, meant that it became possible for the first time to travel the entire Trans-Canada route from coast to coast. During the previous month, a Trans-Canada motorcade traversed the entire Highway, signifying that its entire length, a distance of 4,860 miles, was now open to traffic. The ceremony, at the summit of Rogers Pass, included the unveiling by the Prime Minister of Canada, of a commemorative monument, and representatives of the provinces were present to take part in the event. The Pass in Glacier National Park was selected as the site and focal point due partly to its scenic magnificence and to the major engineering challenges that had been overcome in the construction of this section of the Highway.

The mileage of the Highway approved for grading to March 31, 1963, totals 3,729 of which 3,542 miles were completed. The mileage approved for paving totalled 3,325 of which 3,207 miles were completed. Structures approved for construction totalled 658 of which 559 have been completed.

The approved provincial government commitments on contracts for the construction of the Trans-Canada Highway from December 1949 to March 31, 1963 totalled \$727,720,107.52. Commitments during the fiscal year totalled \$37,326,586.46. Canada's share of the commitments for the 1962-63 fiscal year is estimated at \$21,366,347.69 of which \$2,713,054.46 represents commitments on account of the additional 40 percent contribution made to the cost of construction on ten percent of the highway mileage. Payments to the provinces during the fiscal year totalled \$29,210,258.29.

Provincial reports show that the construction of the Highway provided 572,901 man days (8 hours) of employment during the fiscal year. Offsite labour created by the supply of materials and services is estimated at an

additional 973,932 man days. The total estimated man days of on site employment provided by the construction of the Highway to date is estimated at 11,997,558.

Trans-Canada Highway in National Parks

Approximately 140 miles of the Trans-Canada Highway lie within the boundaries of the various National Parks, and where this is the case, the Department of Public Works is directly responsible for construction of the Highway.

In general, the 1962 construction season saw completion of the bituminous base surfacing on the Highway through the National Parks. Details of the work undertaken in each of the Parks is as follows:

Terra Nova National Park

Work during 1962-63 was confined to the erection of traffic signs, centre stripping and traffic marking on the Highway.

Banff and Yoho National Parks

In Banff National Park the final lift of paving and the construction of the Eisenhower interchange at the junction of the Trans-Canada Highway and the Banff-Windermere Highway were completed.

In Yoho National Park the final lift of paving was completed to Mile 16 and will advance to the remaining 12.4 miles.

Glacier and Revelstoke National Parks

In Glacier National Park the bituminous base surfacing was completed. The snowshed construction program continued with the award and virtual completion of a contract for Tupper No. 1 and No. 2 Snowsheds at a combined cost of approximately \$1.4 million.

A contract was also underway for the installation of guide rail in both Glacier and Revelstoke National Parks.

THE TRANS-CANADA HIGHWAY ACT

The original Agreements covering the construction of the Highway, as provided for in the Trans-Canada Highway Act 1949 (2nd Sess.), C.40, S.1, were executed with the Provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta on April 24, 1950, with the Province of New Brunswick on May 27, 1950, the Province of Newfoundland on June 23, 1950 and with the Province of Nova Scotia on May 15, 1952.

These original Agreements provided, as did the Act, for a paved highway across Canada by December 9, 1956. They also provided that Canada would contribute 50 percent of the cost of new construction and up to 50

percent of the cost of previously constructed sections of the highway where these sections were properly incorporated in the Trans-Canada Highway. Canada's total contribution under the Act was limited to \$150 million.

The Act also provided that the Minister might, out of monies appropriated by Parliament, provide for the construction of such highways within the National Parks as form part of a Trans-Canada Highway.

In the early stages of the project, the Provinces generally experienced many problems in connection with the enlarged construction program. The work began slowly in 1950 and, although construction continued to a high standard, most provinces found it difficult to provide, in their yearly programs, for the work necessary to ensure the completion of the Highway within the seven-year period covered by the Act of 1949. The uncompleted mileage was the subject of discussion at a Federal-Provincial Highway Conference in November 1955. The decisions reached during that Conference resulted in a 1956 Amendment of the Trans-Canada Highway Act. The enactment of this amendment increased the extent of Canada's contribution to the cost of the highway by providing for an additional 40 percent contribution to the cost of construction on one-tenth of the highway mileage in each Province. The construction period was extended to the 31st day of December, 1960, and the aggregate limit of the funds available for expenditure by Canada was increased to \$250 million.

New Agreements under the amended Act were entered into with each of the participating provinces. These Agreements provided that by the 31st day of December, 1960, the highway shall be completed in conformity with the general specifications of Schedule "B", or that it shall constitute a good standard of paved highway. This provision eliminated the necessity of a Province reconstructing sections of the highway which were already paved to a satisfactory provincial standard and made it possible to speed up the work on those sections where reconstruction and paving were most essential.

A second Amendment of the Act in March, 1959 provided for an increase of \$100 million in the amount of the Federal contribution to the cost of constructing the Highway. This increased the aggregate limit of the funds available for expenditure by Canada, under the Act and the Amendments to \$350 million.

A third Amendment of the Act in May 1960, extended the construction period to December 31, 1963 and increased the aggregate amount that may be contributed by Canada to \$400 million.

The Province of Quebec became party to a Trans-Canada Highway Agreement on October 27, 1960.

Appendices "A" and "B" of the report contain outlines of Schedules "A" and "B" of the Agreements with the provinces. Schedule "A" designates the route of the Highway within each province and Schedule "B" the general specifications.

Highway Statistics

The following tables furnish a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1963, and include information pertaining specifically to the fiscal year under review.

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage Under New Agreement

<i>Province</i>	<i>Total Mileage</i>	<i>Approximate Passable Mileage</i>	<i>Paved Mileage (Note ¹)</i>
Newfoundland.....	540	540	186
Prince Edward Island.....	71	71	71
Nova Scotia.....	318	318	305
New Brunswick.....	390	390	357
Quebec.....	399	399	296
Ontario.....	1,453	1,453	1,276
Manitoba.....	309	309	309
Saskatchewan.....	406	406	406
Alberta.....	282	282	282
British Columbia.....	552	552	505
National Parks.....	140	140	140
Total.....	4,860	4,860	4,133

¹Includes mileage on designated route paved prior to December 12, 1949.

TABLE No. 2—GRADING CONSTRUCTION

1 April, 1962 to 31 March, 1963

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	—	12
Prince Edward Island.....	—	—
Nova Scotia.....	4	12
New Brunswick.....	13	17
Quebec.....	44	58
Ontario.....	46	62
Manitoba.....	—	—
Saskatchewan.....	—	—
Alberta.....	—	—
British Columbia.....	—6*	—9*
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	—	—
Totals.....	101	152

*Reductions because of relocations resulting in the elimination of previously constructed sections of the highway.

10 December, 1949 to 31 March, 1963

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	407	320
Prince Edward Island.....	71	71
Nova Scotia.....	132	131
New Brunswick.....	235	233
Quebec.....	141	77
Ontario.....	1,130	1,102
Manitoba.....	250	250
Saskatchewan.....	406	406
Alberta.....	281	281
British Columbia.....	536*	531*
Terra Nova Park.....	25	25
Banff and Yoho Parks.....	80	80
Glacier and Revelstoke Parks.....	35	35
Totals.....	3,729	3,542

*Reductions because of relocations resulting in the elimination of previously constructed sections of the highway.

TABLE No. 3—PAVING CONSTRUCTION
1 April, 1962 to 31 March, 1963

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	61	4
Prince Edward Island.....	—	—
Nova Scotia.....	3	—
New Brunswick.....	19	11
Quebec.....	4	6
Ontario.....	38	37
Manitoba.....	2	3
Saskatchewan.....	—	—
Alberta.....	—	—
British Columbia.....	23	15
Terra Nova Park.....	—	—
Banff and Yoho Parks.....	—	—
Glacier and Revelstoke Parks.....	35	35
Totals.....	185	111

10 December, 1949 to 31 March, 1963

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	233	172
Prince Edward Island.....	71	71
Nova Scotia.....	122	119
New Brunswick.....	226	213
Quebec.....	16	6
Ontario.....	1,044	1,021
Manitoba.....	309	309
Saskatchewan.....	406	406
Alberta.....	281	281
British Columbia.....	477	469
Terra Nova Park.....	25	25
Banff and Yoho Parks.....	80	80
Glacier and Revelstoke Parks.....	35	35
Totals.....	3,325	3,207

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) "On Site" Work on Trans-Canada Highway

1 April, 1962 to 31 March, 1963

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	3,926	4,949	34,719	43,594
Prince Edward Island..	24	15	143	182
Nova Scotia.....	8,590	3,211	19,165	30,966
New Brunswick.....	8,644	4,096	36,575	49,315
Quebec.....	6,089	7,244	19,802	33,135
Ontario.....	43,657	17,626	127,942	189,225
Manitoba.....	—	61	1,168	1,229
Saskatchewan.....	563	232	1,562	2,357
Alberta.....	42	243	1,114	1,399
British Columbia.....	30,446	14,408	116,441	161,295
Terra Nova Park.....	33	—	—	33
Banff and Yoho Parks..	11,515	1,000	5,525	18,040
Glacier and Revelstoke Parks.....	9,632	2,161	30,338	42,131
Totals.....	123,161	55,246	394,494	572,901

Note: The total number of man days (8 hours) of "Off Site" Labour is estimated at 973,932 for the same period.

10 December, 1949 to 31 March, 1963

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	76,896	127,683	746,411	950,990
Prince Edward Island..	30,559	11,426	133,564	175,549
Nova Scotia.....	91,716	50,420	384,682	526,818
New Brunswick.....	127,593	61,476	631,469	820,538
Quebec.....	11,241	11,241	26,160	48,642
Ontario.....	703,126	600,197	3,132,417	4,435,740
Manitoba.....	61,189	35,634	367,653	464,476
Saskatchewan.....	143,641	91,800	431,455	666,896
Alberta.....	79,183	40,686	326,293	446,162
British Columbia.....	317,650	316,498	1,696,131	2,330,279
Terra Nova Park.....	66,559	16,191	174,086	256,836
Banff and Yoho Parks..	140,059	42,299	282,477	464,835
Glacier and Revelstoke Parks.....	130,911	26,779	252,107	409,797
Totals.....	1,980,323	1,432,330	8,584,905	11,997,558

Note: The total number of man days (8 hours) of "Off Site" Labour is estimated at 20,395,849 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS
1 April, 1962 to 31 March, 1963

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 5,140,681.13	\$ 2,291,767.95
Prince Edward Island.....	66,020.88	40,156.44
Nova Scotia.....	2,014,547.09	947,709.57
New Brunswick.....	1,172,960.88	—217,533.23
Quebec.....	13,116,463.79	9,892,444.06
Ontario.....	9,782,283.49	4,786,914.47
Manitoba.....	294,647.87	259,354.67
Saskatchewan.....	—	59,200.00
Alberta.....	330,900.00	262,410.00
British Columbia.....	5,408,081.33	3,043,923.76
Totals.....	\$37,326,586.46	\$21,366,347.69

10 December, 1949 to 31 March, 1963

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share Including Additional 40%</i>
Newfoundland.....	\$ 54,031,580.65	\$ 33,116,133.47
Prince Edward Island.....	9,412,303.16	6,127,988.69
Nova Scotia.....	26,176,455.23	18,041,324.24
New Brunswick.....	59,396,596.93	37,528,479.54
Quebec.....	49,378,164.31	31,142,767.07
Ontario.....	224,579,337.85	127,587,500.69
Manitoba.....	35,122,673.14	20,699,248.11
Saskatchewan.....	28,219,850.32	16,154,270.17
Alberta.....	37,429,407.57	22,471,305.16
British Columbia.....	203,973,738.36	117,193,099.17
Totals.....	\$727,720,107.52	\$430,062,116.31

TABLE No. 5(a)

Summary of Canada's Commitments for additional 40 Percent Contribution from
1 April, 1962 to 31 March, 1963 (Included in Table No. 5)

Newfoundland.....	\$ 278,572.61
Prince Edward Island.....	7,146.00
Nova Scotia.....	59,563.97
New Brunswick.....	804,013.67
Quebec.....	3,334,212.17
Ontario.....	104,227.27
Manitoba.....	112,030.74
Saskatchewan.....	59,200.00
Alberta.....	106,960.00
British Columbia.....	339,883.10
Total.....	\$2,713,054.46

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
1 April, 1962 to 31 March, 1963

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	—	\$ 1,042,763.77	\$ 1,042,763.77
Prince Edward Island.....	—	—	66,348.12	66,348.12
Nova Scotia.....	—	—	1,124,825.60	1,124,825.60
New Brunswick.....	—	—	1,584,987.22	1,584,987.22
Quebec.....	—	—	9,622,062.62	9,622,062.62
Ontario.....	—	—	4,910,725.84	4,910,725.84
Manitoba.....	—	—	500,552.18	500,552.18
Saskatchewan.....	—	—	48,464.62	48,464.62
Alberta.....	—	—	9,760.36	9,760.36
British Columbia.....	*—\$799,572.58	*—\$ 92,374.70	11,191,715.24	10,299,767.96
Totals.....	*—\$799,572.58	*—\$ 92,374.70	\$30,102,205.57	\$29,210,258.29

10 December, 1949 to 31 March, 1963

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 29,516,745.87	\$ 29,673,191.10
Prince Edward Island.....	\$ 288,383.09	—	5,608,922.20	5,897,305.29
Nova Scotia.....	88,501.37	—	16,456,318.38	16,544,819.75
New Brunswick.....	1,447,800.14	193,576.71	35,914,867.26	37,556,244.11
Quebec.....	—	—	12,324,788.76	12,324,788.76
Ontario.....	3,565,543.48	299,790.79	107,507,017.93	111,372,352.20
Manitoba.....	887,446.75	17,958.54	17,424,126.11	18,329,531.40
Saskatchewan.....	270,753.29	3,103.38	15,131,562.33	15,405,419.00
Alberta.....	475,943.78	14,975.87	21,000,665.42	21,491,585.07
British Columbia.....	3,190,102.08	692,171.05	102,023,431.26	105,905,704.39
Totals.....	\$10,214,473.98	\$1,378,021.57	\$362,908,445.52	\$374,500,941.07

*Represents refund of contributions made on account of sections of highway which have been abandoned in favour of new locations.

TABLE No. 6 (a)

Payments by Canada on Account of Additional 40% Contribution from
1 April, 1962 to 31 March, 1963 (Included in Table No. 6)

Newfoundland.....	\$ 1,036.10
Prince Edward Island.....	29,488.05
Nova Scotia.....	205,082.40
New Brunswick.....	3,480.33
Quebec.....	2,130,876.28
Ontario.....	198,887.14
Manitoba.....	222,467.64
Saskatchewan.....	48,464.62
Alberta.....	52.10
British Columbia.....	1,368,670.34
Total.....	<hr/> \$4,208,505.00

TABLE No. 6 (b)

1 April, 1956 to 31 March, 1963 (Included in Table No. 6)

Newfoundland.....	\$ 6,188,692.01
Prince Edward Island.....	1,211,477.49
Nova Scotia.....	4,533,624.90
New Brunswick.....	8,152,884.04
Quebec.....	2,130,876.28
Ontario.....	13,044,617.05
Manitoba.....	2,792,706.35
Saskatchewan.....	1,883,646.61
Alberta.....	3,288,452.63
British Columbia.....	14,705,630.84
Total.....	<hr/> \$57,932,608.20

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in the Schedule "A" of each Provincial Agreement may be described as follows:

NEWFOUNDLAND—From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarenville, Port Blandford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry the terminal of the Prince Edward Island-Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tryon, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—From the New Brunswick-Nova Scotia border to Oxford, thence via Route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycomagh, Baddeck and Little Bras d'Or to the Newfoundland Ferry Terminal at North Sydney.

NEW BRUNSWICK—From the intersection of provincial highway No. 2 and the Nova Scotia-New Brunswick boundary westerly to Aulac, thence easterly via provincial highway No. 16 to Cape Tormentine to provide a connecting link with the Ferry to Prince Edward Island, again from Aulac via provincial highway No. 2, Sackville, Dorchester, Upper Dorchester, College Bridge and Memramcook to bypass Moncton on the North and return to provincial highway No. 2 near River Glade to Anagance, Penobsquis, and a diversion of the town of Sussex to the junction of highways No. 2 and No. 9; thence along provincial highway No. 9 via Coles Island, Young's Cove, Jemseg, Sheffield and Maugerville to a crossing of the Saint John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2 about two miles west of Fredericton; thence via Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, Meductic, and Woodstock to the junction of provincial highways No. 2 and No. 2B; thence on No. 2B to junction of No. 2 and No. 2B one mile south of Hartland, thence on No. 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent, Kilburn, Perth, Andover, Aroostock, Grand Falls, St. Leonard, Green River, St. Basile, Edmundston, St. Jacques to the intersection of provincial Highway No. 2 with the Quebec boundary.

QUEBEC—Commencing where highway number 2 intersects the boundary between Quebec and New Brunswick; thence northwesterly along the general location of highway number two to the vicinity of Riviere du Loup; thence southwesterly along the general location of highway number 2 passing in the vicinity of Ste-Anne-de-la-Pocatiere, Montmagny, to a point southeast of Lauzon; thence by a new diversion south of Levis to a crossing of the Chaudiere River near Charny; thence southwesterly along the general location of highway number nine passing in the vicinity of Drummondville to a point northeast of St-Hyacinthe; thence westerly by a new location to a crossing of the St. Lawrence River over Boucherville Islands and to a junction with Metropolitan Boulevard; thence southwesterly through Montreal Island to a crossing of Vaudreuil Bay over Ile aux Tourtres to a junction with a relocation of number 17 highway; thence along the general location of highway number 17 to intersect the boundary between Quebec and Ontario.

ONTARIO—Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway number 7 to Lindsay; from there via highway No. 12 to Orillia and Waubesaushene; then northerly on a new location to MacTier on Highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

MANITOBA—From the Ontario boundary to north of East Braintree, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with Highway No. 1 west in the vicinity of St. Charles; thence west via Headingley, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and southwesterly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and southwesterly along the Canadian Pacific Railway line to three miles west of Oak Lake; thence northwesterly and paralleling the railway to the Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sinaluta, Indian Head, McLean, Balgonie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg,

Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh.

ALBERTA—From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Rantry, Brooks, thence northwesterly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River, south of Shouldice Bridge, and thence south of the Bow River to a crossing of the River two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

WESTERN NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C. Further west in Glacier National Park the route of the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

BRITISH COLUMBIA—From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on Highway No. 1 thence south of Chilliwack to the Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge, by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the North boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT-OF-WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration—deceleration lanes are approved, and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB-BASE, ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL DISTRICT ENGINEERS
DEVELOPMENT ENGINEERING BRANCH
ENGINEERING AND CONSTRUCTION DIVISION

NEWFOUNDLAND

A. L. Perley,
P.O. Box 4600, Bldg. 301,
Fort Pepperell,
St. John's, Nfld.
Phone: 578-4171

PRINCE EDWARD ISLAND

H. A. Nason,
Box 1268, Dominion Bldg.,
Charlottetown, P.E.I.
Phone: 894-3814

NOVA SCOTIA

H. F. Peters,
Box 875, Room 717,
Ralston Bldg.,
Halifax, N.S.
Phone: 423-9221

NEW BRUNSWICK

H. A. Nason,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: 471-2052

QUEBEC

J. C. Beauchamp,
Champlain Harbour Station,
Wolfe's Cove,
Quebec 2, P.Q.
Phone: 529-2981

ONTARIO

W. Koropatnick,
225 Jarvis Street,
Toronto 2, Ont.
Phone: EM 2-2711

MANITOBA

J. A. Flatt,
201 Federal Bldg.,
269 Main Street,
Winnipeg, Man.
Phone: Whitehall 3-0601

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.,
Regina, Sask.
Phone: LA 32331

ALBERTA

J. E. Savage,
10225—100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 429-2541

BRITISH COLUMBIA

B. G. Harvey,
Room 211,
816 Government St.,
Victoria, B.C.
Phone: 2-5434

WESTERN NATIONAL PARKS

A. H. MacKinnon,
Federal Bldg.,
Banff, Alta.
Phone: 2-3321 or 2-3322

CAI PW 41
A55



Canada

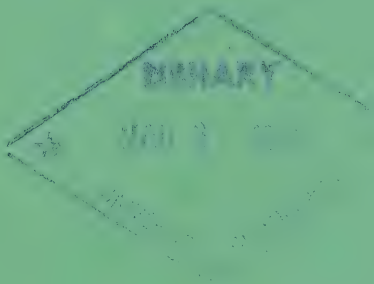
Department of Public Works

Journal

Report of proceedings under the

TRANS-CANADA HIGHWAY

Act



**Annual Report for the
financial year ended March 31,**

1964

DEPARTMENT OF PUBLIC WORKS
DEVELOPMENT ENGINEERING BRANCH

ANNUAL REPORT

PROCEEDINGS UNDER
THE TRANS-CANADA HIGHWAY ACT

Fiscal Year Ended
MARCH 31, 1964

Issued under the Authority of the
HONOURABLE JEAN-PAUL DESCHATELETS
Minister of Public Works
OTTAWA

ROGER DUHAMEL, F.R.S.C.
QUEEN'S PRINTER AND CONTROLLER OF STATIONERY
OTTAWA, CANADA

1964

Cat. No. W41-1964

To His Excellency Major-General
GEORGES P. VANIER, D.S.O., M.C., C.D.,
Governor-General and Commander-in-Chief of Canada

May it please Your Excellency:

The undersigned has the honour to lay before Your Excellency the Annual Report of Proceedings under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1964.

Respectfully submitted,

JEAN-PAUL DESCHATELETS

Minister of Public Works.

The Honourable JEAN-PAUL DESCHATELETS
Minister of Public Works,
OTTAWA

Sir:

I have the honour to submit the fifteenth Annual Report of Proceedings Under the Trans-Canada Highway Act, Chapter 269, Revised Statutes of Canada, (1952), for the fiscal year ended March 31st, 1964.

Your obedient servant,

LUCIEN LALONDE

Deputy Minister

CONTENTS

	PAGE
CONSTRUCTION PROGRESS.....	1
TRANS-CANADA HIGHWAY IN NATIONAL PARKS.....	1
THE TRANS-CANADA HIGHWAY ACT.....	2
HIGHWAY STATISTICS	
Table 1—Mileage, etc.....	4
Table 2—Grading construction.....	5
Table 3—Paving construction.....	6
Table 4—Labour Report.....	7
Table 5—Summary of Contractual Commitments.....	8
Table 6—Summary of Payments to Provincial Governments.....	9
APPENDICES	
A—Schedule A—Route of Highway.....	10
B—Schedule B—General Specifications.....	14
C—Federal District Engineers.....	16

REPORT OF
PROCEEDINGS UNDER THE TRANS-CANADA HIGHWAY ACT
FOR THE FISCAL YEAR ENDED MARCH 31, 1964

CONSTRUCTION PROGRESS

Good progress was made during the year on such major Trans-Canada Highway projects as the Port Mann Bridge in British Columbia and the bridge-tunnel crossing of the St. Lawrence River at Montreal. Statistics for the year also show a marked increase in projects undertaken in the Atlantic provinces.

The mileage of the Highway approved for grading to March 31, 1964 totals 3,959 of which 3,729 miles were completed. The mileage approved for paving totalled 3,557 of which 3,414 miles were completed. Structures approved for construction totalled 699 of which 648 have been completed.

The approved provincial government commitments on contracts for the construction of the Trans-Canada Highway from December 1949 to March 31, 1964 totalled \$806,308,072.23. Commitments during the fiscal year totalled \$78,587,964.71. Canada's share of the commitments for the 1963-64 fiscal year is estimated at \$62,702,542.98. Payments to the provinces during the fiscal year totalled \$39,240,283.95.

Provincial reports show that the construction of the Highway provided 627,657 man days (8 hours) of employment during the fiscal year. Off-site labour created by the supply of materials and services is estimated at an additional 1,067,017 man days. The total estimated man days of on-site employment provided by the construction of the Highway to date is estimated at 12,625,215.

Trans-Canada Highway in National Parks

The Development Engineering Branch of the Department of Public Works is directly responsible for construction of approximately 140 miles of highway within the boundaries of five National Parks.

Details of the work program undertaken in each of the National Parks during the 1963 construction season is as follows:

Terra Nova National Park

Work during 1963-64 was confined to seeding operations and miscellaneous clean-up along the highway.

Banff and Yoho National Parks

In Banff Park, work was completed on the paving of the Eisenhower Interchange. The erection of guide rail material, traffic signs, plus traffic marking and general clean-up operations were also completed during the 1963-64 season.

The application of final surface treatment, during 1963, on 12.4 miles of highway completed the paving program in Yoho National Park.

Glacier and Revelstoke National Parks

The snowshed construction continued with the award of a contract for Tupper Timber and extension to Len's at a cost of approximately \$1 million. A contract was also awarded for Avalanche Defences involving the construction of retaining barriers and channel diversions at locations not requiring snowsheds.

The 1963-64 construction season saw the completion of the contract for guide rail installation in both Glacier and Revelstoke National Parks, as well as work on miscellaneous clean-up.

THE TRANS-CANADA HIGHWAY ACT

The original Agreements covering the construction of the Highway, as provided for in the Trans-Canada Highway Act 1949 (2nd Sess.), C.40, S.I. were executed with the Provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta on April 24, 1950, with the Province of New Brunswick on May 27, 1950, the Province of Newfoundland on June 23, 1950 and with the Province of Nova Scotia on May 15, 1952.

These original Agreements provided, as did the Act, for a paved highway across Canada by December 9, 1956. They also provided that Canada would contribute 50 percent of the cost of new construction and up to 50 percent of the cost of previously constructed sections of the highway where these sections were properly incorporated in the Trans-Canada Highway. Canada's total contribution under the Act was limited to \$150 million.

The Act also provided that the Minister might, out of monies appropriated by Parliament, provide for the construction of such highways within the National Parks as form part of a Trans-Canada Highway.

In the early stages of the project, the Provinces generally experienced many problems in connection with the enlarged construction program. The work began slowly in 1950 and, although construction continued to a high standard, most provinces found it difficult to provide, in their yearly programs, for the work necessary to ensure the completion of the Highway within the seven-year period covered by the Act of 1949. The uncompleted mileage was the subject of discussion at a Federal-Provincial Highway Conference in November 1955. The decisions reached during that Confer-

ence resulted in a 1956 Amendment of the Trans-Canada Highway Act. The enactment of this amendment increased the extent of Canada's contribution to the cost of the highway by providing for an additional 40 percent contribution to the cost of construction on one-tenth of the highway mileage in each Province. The construction period was extended to the 31st day of December, 1960, and the aggregate limit of the funds, available for expenditure by Canada was increased to \$250 million.

New Agreements under the amended Act were entered into with each of the participating provinces. These Agreements provided that by the 31st day of December, 1960, the highway shall be completed in conformity with the general specifications of Schedule "B", or that it shall constitute a good standard of paved highway. This provision eliminated the necessity of a Province reconstructing sections of the highway which were already paved to a satisfactory provincial standard and made it possible to speed up the work on those sections where reconstruction and paving were most essential.

Legislation passed in 1959 and 1960 extended the construction period to December 31, 1963 and increased the amount of Canada's contribution to a maximum of \$400 million.

The Province of Quebec became party to a Trans-Canada Highway Agreement on October 27, 1960.

Legislative authority was provided in 1963 for an extension of the construction period to December 31, 1967, and allowed for federal contributions up to \$625 million. It also provided for payment by Canada of 90 percent of construction costs incurred by the Atlantic provinces from April 1, 1963.

Appendices "A" and "B" of the report contain outlines of Schedules "A" and "B" of the Agreements with the provinces. Schedule "A" designates the route of the Highway within each province and Schedule "B" the general specifications.

Highway Statistics

The following tables furnish a statistical presentation of progress on the Highway from December 10, 1949 to March 31, 1964, and include information pertaining specifically to the fiscal year under review.

TABLE No. 1

Total Mileage of Designated Route, Passable Mileage and Paved Mileage under
New Agreement

<i>Province</i>	<i>Total Mileage</i>	<i>Approximate Passable Mileage</i>	<i>Paved Mileage (Note 1)</i>
Newfoundland.....	540	540	267
Prince Edward Island.....	71	71	71
Nova Scotia.....	318	318	303
New Brunswick.....	390	390	340
Quebec.....	399	399	308
Ontario.....	1,453	1,453	1,269
Manitoba.....	309	309	309
Saskatchewan.....	406	406	406
Alberta.....	282	282	282
British Columbia.....	552	552	536
National Parks.....	140	140	140
Totals.....	4,860	4,860	4,231

1. Includes mileage on designated route paved prior to December 12, 1949.

TABLE No. 2—GRADING CONSTRUCTION

1 April, 1963 to 31 March, 1964

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	204*	45
Prince Edward Island.....	—	—
Nova Scotia.....	7	2
New Brunswick.....	38	36
Quebec.....	26	49
Ontario.....	28	36
Manitoba.....	—	—
Saskatchewan.....	—	—
Alberta.....	—	—
British Columbia.....	14	19
Terra Nova Park.....	—	—
Banff & Yoho Parks.....	—	—
Glacier & Revelstoke Parks.....	—	—
Totals.....	317	187

10 December, 1949 to 31 March, 1964

<i>Province</i>	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	524	365
Prince Edward Island.....	71	71
Nova Scotia.....	139	133
New Brunswick.....	273	269
Quebec.....	167	126
Ontario.....	1,158	1,138
Manitoba.....	250	250
Saskatchewan.....	406	406
Alberta.....	281	281
British Columbia.....	550	550
Terra Nova Park.....	25	25
Banff & Yoho Parks.....	80	80
Glacier & Revelstoke Parks.....	35	35
Totals.....	3,959	3,729

*Includes 87 miles of upgrading which had previously been partly graded by provincial day labour.

TABLE No. 3—PAVING CONSTRUCTION

1 April, 1963 to 31 March, 1964

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	86	81
Prince Edward Island.....	—	—
Nova Scotia.....	—	3
New Brunswick.....	3	16
Quebec.....	55	16
Ontario.....	21	24
Manitoba.....	—	—
Saskatchewan.....	—	—
Alberta.....	—	—
British Columbia.....	67	67
Terra Nova Park.....	—	—
Banff & Yoho Parks.....	—	—
Glacier & Revelstoke Parks.....	—	—
Totals.....	232	207

10 December, 1949 to 31 March, 1964

<i>Province</i>	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland.....	319	253
Prince Edward Island.....	71	71
Nova Scotia.....	122	122
New Brunswick.....	229	229
Quebec.....	71	22
Ontario.....	1,065	1,045
Manitoba.....	309	309
Saskatchewan.....	406	406
Alberta.....	281	281
British Columbia.....	544	536
Terra Nova Park.....	25	25
Banff & Yoho Parks.....	80	80
Glacier & Revelstoke Parks.....	35	35
Totals.....	3,557	3,414

TABLE No. 4—LABOUR REPORT

Man Days (8 hours) "On Site" Work on Trans-Canada Highway
1 April, 1963 to 31 March, 1964

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	21,047	15,550	107,457	144,054
Prince Edward Island...	3,288	1,269	12,687	17,244
Nova Scotia.....	8,226	1,691	10,386	20,303
New Brunswick.....	13,228	4,477	61,326	79,031
Quebec.....	2,177	9,240	15,093	26,510
Ontario.....	38,945	12,031	113,164	164,140
Manitoba.....	—	—	—	—
Saskatchewan.....	59	61	316	436
Alberta.....	29	129	337	495
British Columbia.....	27,564	15,004	109,634	152,202
Terra Nova Park.....	61	—	—	61
Banff and Yoho Parks..	7,526	107	625	8,258
Glacier and Revelstoke Parks.....	4,770	1,509	8,644	14,923
Totals.....	126,920	61,068	439,669	627,657

NOTE: The total number of man days (8 hours) of "Off Site" Labour is estimated at 1,067,017 for the same period.

10 December, 1949 to 31 March, 1964

<i>Province</i>	<i>Field Engineering</i>	<i>Construction Supervision</i>	<i>Construction Work</i>	<i>Totals</i>
Newfoundland.....	97,943	143,233	853,868	1,095,044
Prince Edward Island...	33,847	12,695	146,251	192,793
Nova Scotia.....	99,942	52,111	395,068	547,121
New Brunswick.....	140,821	65,953	692,795	899,569
Quebec.....	13,418	20,481	41,253	75,152
Ontario.....	742,071	612,228	3,245,581	4,599,880
Manitoba.....	61,189	35,634	367,653	464,476
Saskatchewan.....	143,700	91,861	431,771	667,332
Alberta.....	79,212	40,815	326,630	446,657
British Columbia.....	345,214	331,502	1,805,765	2,482,481
Terra Nova Park.....	66,620	16,191	174,086	256,897
Banff and Yoho Parks..	147,585	42,406	283,102	473,093
Glacier and Revelstoke Parks.....	135,681	28,288	260,751	424,720
Totals.....	2,107,243	1,493,398	9,024,574	12,625,215

NOTE: The total number of man days (8 hours) of "Off Site" Labour is estimated at 21,462,866 for the same period.

TABLE No. 5—SUMMARY OF CONTRACTUAL COMMITMENTS

1 April, 1963 to 31 March, 1964

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share</i>
Newfoundland.....	\$42,026,896.79	\$37,924,167.11
Prince Edward Island.....	1,264,025.00	1,185,732.50
Nova Scotia.....	1,216,489.53	982,557.17
New Brunswick.....	7,337,463.54	6,147,968.12
Quebec.....	20,141,159.43	14,263,455.04
Ontario.....	1,103,556.52	1,773,905.72
Manitoba.....	37,100.00	33,390.00
Saskatchewan.....	47,100.00	23,550.00
Alberta.....	92,650.00	46,325.00
British Columbia.....	7,528,636.94	3,869,303.76
Totals.....	\$78,587,964.71	\$62,702,542.98

10 December, 1949 to 31 March, 1964

<i>Province</i>	<i>Total Commitment Approved</i>	<i>Canada's Share</i>
Newfoundland.....	\$ 96,058,477.44	\$ 71,040,300.58
Prince Edward Island.....	10,676,328.16	7,313,721.19
Nova Scotia.....	27,392,944.76	19,023,881.41
New Brunswick.....	66,734,060.47	43,676,447.66
Quebec.....	69,539,323.74	45,406,222.11
Ontario.....	223,475,781.33	125,813,594.97
Manitoba.....	35,159,773.14	20,732,638.11
Saskatchewan.....	28,266,950.32	16,177,820.17
Alberta.....	37,522,057.57	22,517,630.16
British Columbia.....	211,502,375.30	121,062,402.93
Totals.....	\$806,308,072.23	\$492,764,569.29

TABLE No. 6—SUMMARY OF PAYMENTS TO PROVINCIAL GOVERNMENTS
1 April, 1963 to 31 March, 1964

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	—	\$11,304,606.82	\$11,304,606.82
Prince Edward Island.....	—	—	1,003,942.04	1,003,942.04
Nova Scotia.....	—	—	882,307.95	882,307.95
New Brunswick.....	—	—	5,051,224.62	5,051,224.62
Quebec.....	—	—	8,006,350.60	8,006,350.60
Ontario.....	—	—	4,209,039.20	4,209,039.20
Manitoba.....	—	—	59,619.84	59,619.84
Saskatchewan.....	—	—	2,385.42	2,385.42
Alberta.....	—	—	245,772.69	245,772.69
British Columbia.....	—	—	8,475,034.77	8,475,034.77
Totals.....	—	—	\$39,240,283.95	\$39,240,283.95

10 December, 1949 to 31 March, 1964

<i>Province</i>	<i>Prior Construction</i>	<i>Interim Construction</i>	<i>New Construction</i>	<i>Totals</i>
Newfoundland.....	—	\$ 156,445.23	\$ 40,821,352.69	\$ 40,977,797.92
Prince Edward Island.....	\$ 288,383.09	—	6,612,864.24	6,901,247.33
Nova Scotia.....	88,501.37	—	17,338,626.33	17,427,127.70
New Brunswick.....	1,447,800.14	193,576.71	40,966,091.88	42,607,468.73
Quebec.....	—	—	20,331,139.36	20,331,139.36
Ontario.....	3,565,543.48	299,790.79	111,716,057.13	115,581,391.40
Manitoba.....	887,446.75	17,958.54	17,483,745.95	18,389,151.24
Saskatchewan.....	270,753.29	3,103.38	15,133,947.75	15,407,804.42
Alberta.....	475,943.78	14,975.87	21,246,438.11	21,737,357.76
British Columbia.....	3,190,102.08	692,171.05	110,498,466.03	114,380,739.16
Totals.....	\$10,214,473.98	\$1,378,021.57	\$402,148,729.47	\$413,741,225.02

APPENDIX "A"

Route of Highway—Schedule "A"

The route designated in Schedule "A" of each Provincial Agreement may be described as follows:

NEWFOUNDLAND—From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarenville, Port Blandford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

PRINCE EDWARD ISLAND—Commencing at Wood Islands Ferry the terminal of the Prince Edward Island-Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tyron, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

NOVA SCOTIA—From the New Brunswick-Nova Scotia border to Oxford, thence via Route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycocomagh, Baddeck and Little Bras d'Or to the New foundland Ferry Terminal at North Sydney.

NEW BRUNSWICK—From the intersection of provincial highway No. 2 and the Nova Scotia-New Brunswick boundary westerly to Aulac, thence easterly via provincial highway No. 16 to Cape Tormentine to provide a connecting link with the Ferry to Prince Edward Island, again from Aulac via provincial highway No. 2, Sackville, Dorchester, Upper Dorchester, College Bridge and Memramcook to bypass Moncton on the North and return to provincial highway No. 2 near River Glade to Anagance, Penobsquis, and a diversion of the town to Sussex to the junction of highways No. 2 and No. 9; thence along provincial highway No. 9 via Coles Island, Young's Cove, Jemseg, Sheffield and Maugerville to a crossing of the Saint John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2 about two miles west of Fredericton; thence via Kingsclear, Lond Creek, Hawkshaw, Pokiok, Temple, Meductic, and Woodstock to

the junction of provincial highways No. 2 and No. 2B; thence on No. 2B to junction of No. 2 and No. 2B one mile south of Hartland, thence on No. 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent, Kilburn, Perth, Andover, Aroostook, Grand Falls, St. Leonard, Green River, St. Basile, Edmundston, St. Jacques to the intersection of provincial Highway No. 2 with the Quebec boundary.

QUEBEC—Commencing where highway No. 2 intersects the boundary between Quebec and New Brunswick; thence northwesterly along the general location of highway No. 2 to the vicinity of Riviere du Loup; thence southwesterly along the general location of highway No. 2 passing in the vicinity of Ste-Anne-de-la-Pocatiere, Montmagny, to a point southeast of Lauzon; thence by a new diversion south of Levis to a crossing of the Chaudiere River near Charny; thence southwesterly along the general location of highway No. 9 passing in the vicinity of Drummondville to a point northeast of St-Hyacinthe; thence westerly by a new location to a crossing of the St. Lawrence River over Boucherville Islands and to a junction with Metropolitan Boulevard; thence southwesterly through Montreal Island to a crossing of Vaudreuil Bay over Ile aux Tourtres to a junction with a relocation of highway No. 17; thence along the general location of highway No. 17 to intersect the boundary between Quebec and Ontario.

ONTARIO—Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway No. 7 to Lindsay; from there via highway No. 12 to Orillia and Waubesa; then northerly on a new location to MacTier on Highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via highway No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

MANITOBA—From the Ontario boundary to north of East Braintree, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with highway No. 1 west in the vicinity of St. Charles; thence west via Headingley, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and southwesterly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and southwesterly

along the Canadian Pacific Railway line to three miles west of Oak Lake; thence northwesterly and paralleling the railway to the Saskatchewan boundary.

SASKATCHEWAN—Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sintaluta, Indian Head, McLean, Balgonie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh.

ALBERTA—From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, thence northwesterly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River, south of Shouldice Bridge, and thence south of the Bow River to a crossing of the River two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

WESTERN NATIONAL PARKS—The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leancoil, B.C. Further west in Glacier National Park the route of the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

BRITISH COLUMBIA—From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on highway No. 1 thence south of Chilliwack to the

Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge, by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the North boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

APPENDIX "B"

General Specifications of the Highway—Schedule "B"

1. RIGHT-OF-WAY

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. PAVEMENT

- (a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration—deceleration lanes are approved, and a minimum of twenty-two (22) feet.
- (b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot Plant-Mix with graded aggregate.
- (c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.
- (d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. SHOULDERS

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. OBSTRUCTIONS

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. STONE BASE COURSE, SUB-BASE, ELEVATION OF WATER TABLE LEVEL

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. CURVATURE

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. GRADIENT

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. SIGHT DISTANCES

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical light distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. BRIDGES

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

APPENDIX "C"

FEDERAL DISTRICT ENGINEERS DEVELOPMENT ENGINEERING BRANCH ENGINEERING AND CONSTRUCTION DIVISION

NEWFOUNDLAND

A. L. Perley,
P.O. Box 4600, Bldg. 301,
Fort Pepperrell,
St. John's, NFLD.
Phone: 578-4171

PRINCE EDWARD ISLAND

H. A. Nason,
Box 1268, Dominion Bldg.,
Charlottetown, P.E.I.
Phone: 894-3814 - 6555

NOVA SCOTIA

H. A. Nason,
Box 875, Room 717,
Ralston Bldg.,
Halifax, N.S.
Phone: 423-9221

NEW BRUNSWICK

H. A. Nason,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: 454-2052

QUEBEC

J. C. Beauchamp,
Champlain Harbour Station,
Wolfe's Cove,
Quebec 2, P.Q.,
Phone: 529-2981

ONTARIO

H. F. Peters,
241 Jarvis Street,
Toronto 2, Ont.
Phone: 362-6211

MANITOBA

J. A. Flatt,
201 Federal Bldg.,
269 Main Street,
Winnipeg, Man.
Phone: Whitehall 3-0601

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.,
Regina, Sask.
Phone: LA. 3-2331

ALBERTA

J. E. Savage,
10225-100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 429-2541

BRITISH COLUMBIA

B. G. Harvey,
Room 211,
816 Government St.,
Victoria, B.C.,
Phone 2-5434

WESTERN NATIONAL PARKS

A. H. MacKinnon,
Federal Bldg., Banff, Alta.
Phone: 762-3321 or 762-3322



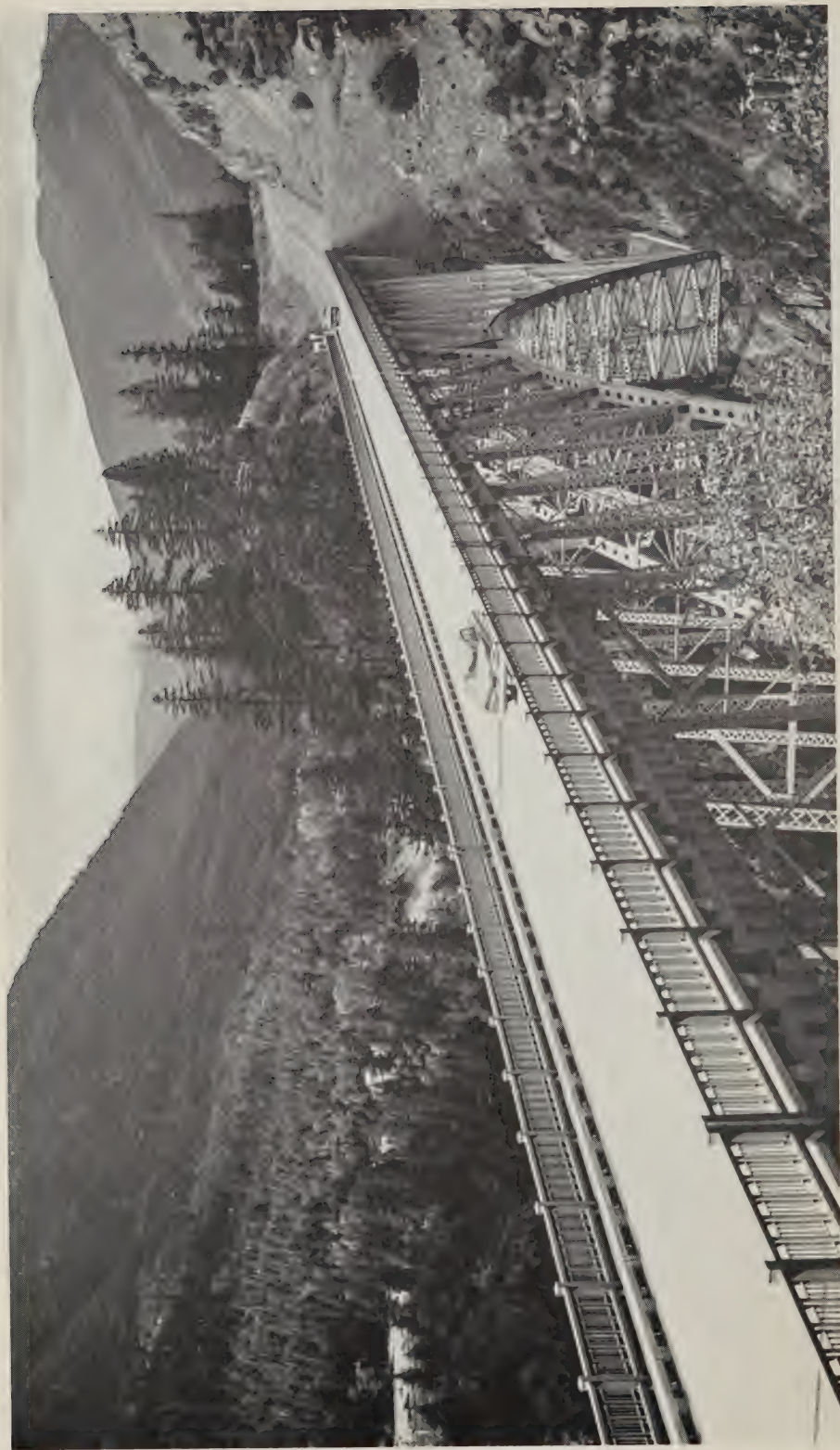
The construction of the Trans-Canada Highway through Rogers Pass in Glacier National Park was a formidable engineering feat. Here, mountains tower to over 10,000 feet in height and the average snowfall is 340 inches. Here, too, is some of the most magnificent scenery to be found in all of Canada.

La construction de la route transcanadienne au travers du col Rogers dans le parc national de Glacier est une réalisation technique formidable. Ici, les montagnes ont plus de 10,000 pieds de hauteur et la précipitation moyenne de la neige est de 340 pouces. Ici aussi se trouvent certains des plus beaux paysages du Canada.



The Maritime Provinces made great progress during the year in constructing their sections of the Trans-Canada Highway. In Newfoundland, where this picture shows paving operations underway, by the end of the fiscal year, virtually all grading contracts for the unfinished portions of the Highway had been awarded.

Les Provinces Maritimes ont réalisé de grands progrès, cette année, dans la construction de leurs tronçons de la route transcanadienne. A Terre-Neuve, où cette photo de la pose du revêtement a été prise, on avait adjugé à la fin de l'exercice financier presque tous les contrats pour le terrassement des tronçons non finis de la route.



Impressive engineering structures abound throughout the length of the Trans-Canada Highway — this modern bridge crosses the Fraser Canyon near Boston Bar in British Columbia.

De remarquables ouvrages d'art abondent sur le parcours de la route transcanadienne — ce pont moderne traverse la gorge Fraser près de Boston Bar en Colombie-Britannique.



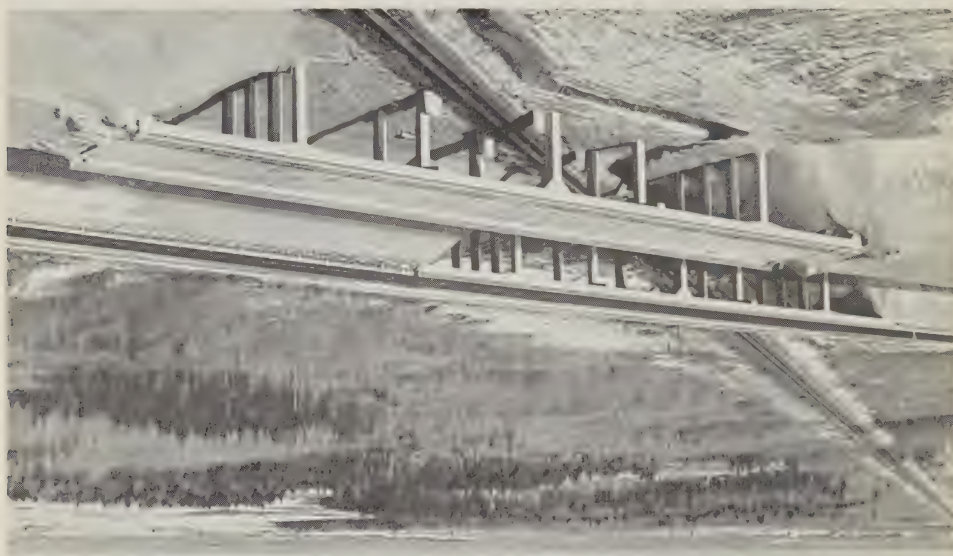
Beautiful scenery, lakes and rivers are to be found along the Trans-Canada Highway in many parts of Ontario. This is especially true in the northern parts of the province from Lake Superior westward to the Manitoba border. The picture here is an aerial view of the Kenora area in Ontario.

Les lacs, les rivières et les beaux paysages parsèment le parcours de la route transcanadienne en Ontario, surtout dans le nord de cette province entre le lac Supérieur et le Manitoba, à l'ouest. Cette photo est une vue aérienne de la région de Kenora.



The flat prairies with their gigantic wheat fields presents a different scene for motorists travelling the Trans-Canada Highway in the west. This aerial view of the highway near Indian Head, Sask., is typical of the flat terrain to be found in the grain growing provinces.

Dans l'ouest, les prairies aux vastes champs de blé offrent un paysage différent aux automobilistes qui empruntent la route transcanadienne. Cette photo aérienne de la route près d'Indian Head (Sask.) est typique du terrain plat qu'on trouve dans les provinces des prairies.



Motorists travelling between Montreal and Quebec City will be using a four lane divided highway along the Trans-Canada Highway. In order to ensure the safety of motorists an overpass to avoid a level crossing is under construction near Villeroi.

Les automobilistes qui voyageront sur la route transcanadienne entre Montréal et Québec rouleront sur une route divisée à quatre voies. Afin d'éviter les accidents de la route, on construit, près de Villeroi, un passage supérieur pour supprimer un passage à niveau.

INGÉNIEURS RÉGIONAUX FÉDÉRAUX
DIRECTION DU GÉNIE (AMÉNAGEMENT)
DIVISION DU GÉNIE ET DE LA CONSTRUCTION

TERRE-NEUVE

A. L. Perley
Case postale 4600, édifice 301
Fort Pepperell
Saint-Jean (T.-N.)
Téléphone: 578-4171

LE-DU-PRINCE-ÉDOUARD

H. A. Nason
Case 1268, édifice Dominion
Charlottetown (I. P.-E.)
Téléphone: 894-3814-6555

NOUVELLE-ÉCOSSE

H. A. Nason
Case 875, pièce 717
Edifice Ralston
Halifax (N.-E.)
Téléphone: 423-9221

NOUVEAU-BRUNSWICK

H. A. Nason
Case 1296, édifice fédéral
Fredericton (N.-B.)
Téléphone: 454-2052

QUÉBEC

J. C. Beauchamp
Gare maritime Champlain
Anse-au-Foulon
Québec 2 (P.Q.)
Téléphone: 529-2981

PARCS NATIONAUX DE L'OUEST

A. H. MacKinnon

Edifice fédéral

Banff (Alb.)

Téléphone: 762-3321 ou 762-3322

ALBERTA

J. E. Savage
10225/100^e Avenue
Case 488
Edmonton (Alb.)
Téléphone: 429-2541

SASKATCHEWAN

J. A. Platt
325, édifice Motherwell
Regina (Sask.)
Téléphone: LA 3-2331

MANITOBA

H. F. Peters
241, rue Jarvis
Toronto 2 (Ont.)
Téléphone: 362-6211

ONTARIO

J. A. Platt
201, édifice fédéral
269, rue Main
Winnipeg (Man.)
Téléphone: WHitehall 3-0601

COLOMBIE-BRITANNIQUE

B. G. Harvey
Pièce 211
816, rue Government
Victoria (C.-B.)
Téléphone: 2-5434

8. DISTANCES À VUE

Aux endroits où le terrain le permet, la distance à vue horizontale maximum et la distance à vue verticale minimum seront de six cents (600) pieds. En d'autres termes, le conducteur d'une voiture pourra voir un objet de six pouces de hauteur placé sur le pavé à 600 pieds en avant de lui, lorsque ses yeux se trouvent à quatre (4) pieds et six (6) pouces au-dessus du pavé.

9. PONTS

a) Charge H20-S16.

- b) Dégagements supérieurs, sur la pleine largeur entre les bordures, 14 pieds et 6 pouces.
- c) Pour les ponts de 30 pieds ou moins de longueur, la chaussée entre les bordures aura la largeur réunie du pavé et des accotements.
- d) Pour les ponts de plus de 30 pieds et jusqu'à 100 pieds de longueur, la chaussée minimum entre les bordures aura 27 pieds et la largeur minimum des bordures de chaque côté sera de 18 pouces, ou le tablier offrira un dégagement équivalent.
- e) Pour les ponts de plus de 100 pieds de longueur, la largeur minimum entre les bordures sera de 24 pieds et la largeur minimum des bordures de chaque côté sera de 18 pouces, ou le tablier offrira un dégagement équivalent.

Devis général de la route—Liste « B »

1. EMPRISE

La largeur minimum de l'emprise sera de cent (100) pieds. Lorsque la route traverse des régions peuplées entraînant ainsi de fortes dépenses, une largeur minimum initiale de soixante-six (66) pieds sera acceptable.

2. PAVÉ

- a) La largeur du pavé sera d'au plus vingt-quatre (24) pieds, sauf lorsque des ouvrages particuliers tels que voies d'accélération et de ralentissement sont approuvés, et d'au moins vingt-deux (22) pieds.
- b) Le pavé sera d'un type bitumineux-minéral généralement appelé mélange bitumineux malaxé à chaud à l'usine et contenant des éléments tris.
- c) Une fois rendu compact, le pavé bitumineux-minéral n'aura pas moins de trois (3) pouces d'épaisseur.

- d) Aux endroits où il est opportun de confectionner un pavé en béton, l'épaisseur et le type utilisés habituellement par les provinces seront acceptables.

3. ACCOTEMENTS

La largeur des accotements de chaque côté du pavé sera de dix (10) pieds, lorsqu'il est économiquement possible de les confectionner à cette largeur. Des largeurs plus faibles seront acceptables jusqu'à un minimum de cinq (5) pieds lorsque le terrain et (ou) l'économie rendent la chose nécessaire.

4. OBSTACLES

La distance minimum entre le bord du pavé et tout obstacle sur les accotements sera d'un (1) pied de moins que la largeur des accotements.

5. INFRASTRUCTURE EN PIERRE, ASSISE ET ELEVATION DU NIVEAU DE LA NAPPE AQUIFÈRE

La confection de l'infrastructure en pierre, de l'assise et du système de drainage régularisant l'élévation du niveau de la nappe aquifère sera effectuée de façon que le tout produise une chaussée ayant une capacité portante de charge d'essieu périodique de 18,000 livres.

6. BOMBEMENT

Le bombement de l'axe du pavé ne dépassera pas six (6) degrés, sauf où le terrain ne le permet pas avec une économie raisonnable. Aux endroits où la chose est possible, on estime qu'il est opportun de réduire le bombement maximum à trois (3) degrés.

7. PENTE

La pente de la route sera d'au plus 6 p. 100, sauf dans les cas où la chose est économiquement impossible, alors que 7 ou 8 p. 100 seront acceptables sur des courtes distances.

national du mont Revelstoke, la route côtoie de nouveau la rivière Illecillewaet.

COLOMBIE-BRITANNIQUE—A partir du point de croisement de la route provinciale n° 1 et de la limite ouest du parc national d'Yoho, à dix-sept milles à l'est de Golden; de là, dans une direction nord-ouest en longeant le bassin du fleuve Columbia jusqu'à la rivière Beaver; de là, jusqu'à la limite est du parc national de Glacier en traversant le parc jusqu'au parc de Revelstoke, soit à travers le parc ou au sud de la limite du parc jusqu'à Revelstoke; de là, dans une direction ouest en passant sur la route n° 1 jusqu'à Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Vale, Hope, puis jusqu'au Mille 142 sur la route n° 1; de là, au sud de Chillicwack jusqu'au canal de Veddar; de là, en bordure de la prairie de Sumas via Telair en contour-nant Abbotsford au sud; de là, dans une direction ouest sur un parcours à établir jusqu'au pont sur le détroit Second et sur un autre parcours à établir également jusqu'à Horseshoe Bay. Commentant de nouveau à Départure Bay et dans une direction sud en passant par Nanaïmo via les rues Ravine et Nicol jusqu'à Ladysmith, Duncan, puis jusqu'à la limite nord de Victoria.

Aux endroits où l'emplacement de la route n'est pas décrit en détail dans le parcours susmentionné, la route suivra la plus courte distance pratique entre les endroits indiqués. La route peut suivre le plus court détour pratique autour de tout endroit cité.

en traversant la rivière Assiniboine jusqu'à la voie ferrée du National-Canadien; de là, parallèlement à cette voie jusqu'à sa jonction avec la route n° 1 ouest, puis dans une direction ouest en passant par Portage-la-Prairie et près de Burnside, Bagot, McGregor et Austin jusqu'à un point à deux milles à l'ouest d'Austin, puis dans une direction sud-ouest jusqu'à Sidney; de là, dans une direction ouest en suivant un nouveau parcours jusqu'à un mille à l'ouest de Kemnay, au Nord-est d'Alexander, et dans une direction sud-ouest le long de la voie ferrée du Pacifique-Canadien jusqu'à trois milles à l'ouest d'Oak Lake; de là, dans une direction nord-ouest et parallèlement à la voie ferrée jusqu'à la frontière de la Saskatchewan.

SASKATCHEWAN—A partir de la frontière du Manitoba à l'ouest de la route provinciale n° 1, en passant par ou près de Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Woiseley, Sintaluta, Indian Head, McLean, Balgonie, Regina, Belle-Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secotan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, et jusqu'à la frontière de l'Alberta, à un mille à l'est de Walsh.

ALBERTA—A partir du point de croisement de la route provinciale n° 1 et de la frontière de la Saskatchewan dans une direction ouest en passant par Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, puis dans une direction nord-ouest en passant par ou près de Southesk jusqu'à Bassano; de là, dans une direction ouest via Crowfoot, Cluny, Gleichen, Strathmore, Calgary jusqu'à une traversée de la rivière Bow au sud du pont de Shoudice, puis au sud de la rivière Bow jusqu'à une traversée de la rivière à deux milles à l'est de Canmore et jusqu'au point de croisement de la route provinciale n° 1 et de la frontière entre l'Alberta et le parc national, à l'entrée est du parc de Banff.

PARCS NATIONAUX DE L'OUEST—Le gouvernement fédéral

assume l'entière responsabilité de la construction et de l'entretien de la route transcanadienne sur le parcours de 117 milles dans les parcs nationaux de Banff, Yoho, Glacier et du mont Revelstoke. Ce parcours commence à l'entrée est du parc national de Banff, longe la vallée de la rivière Bow dans une direction ouest et pénètre dans le parc national d'Yoho (C.-B.) jusqu'à la ligne divisoire appelée "Great Divide". A partir de ce point, la route suit la vallée de la rivière Kicking Horse jusqu'à Fielde et atteint la limite ouest du parc national d'Yoho près des Lenchcoil (C.-B.). Plus à l'ouest dans le parc national de Glacier, le parcours de la route est parallèle à la rivière Beaver jusqu'aux environs de l'entrée est du tunnel Connaught du chemin de fer Pacifique-Canadien. De ce point, la route traverse le col Rogers et longe ensuite la rivière Illecillewaet jusqu'à la limite du parc. Dans le parc

MANITOBA—A partir de la frontière ontarienne jusqu'au nord d'East Brantree, McMunn et au sud d'Hadashville jusqu'à six milles à l'ouest de Richer; de là, au nord du chemin de fer National-Canadien jusqu'aux environs de Saint-Boniface; de là, dans une direction ouest en traversant les rivières Seine et Rouge et la grande route provinciale n° 75 jusqu'au point de croisement des routes n°s 2 et 3 près d'Oak Bluff; de là, dans une direction nord en traversant la rivière Assiniboine jusqu'à la jonction avec la route n° 1 ouest aux environs de Saint-Charles; de là, dans une direction ouest via Headingly

ONTARIO—A partir du point de croisement de la route provinciale n° 17 et de la frontière Ontario-Québec jusqu'à un mille à l'ouest de Green Creek, puis jusqu'à Ottawa, Carleton Place, Perth, Peterborough; de là, par la voie de la route n° 7 jusqu'à Lindsay; de là, en passant sur la route n° 12 jusqu'à Orillia et Wabush; de là, dans une direction nord en suivant un nouveau parcours jusqu'à MacTier sur la route n° 69, Parry Sound, Britt, Burwash et Sudbury. De là, dans une direction ouest en suivant la route n° 17 jusqu'au Sault-Sainte-Marie, de là, jusqu'à Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden et Kenora jusqu'au point de croisement de la route n° 17 et de la frontière Ontario-Manitoba.

QUÉBEC—A partir de l'endroit où la route n° 2 croise la limite entre Québec et le Nouveau-Brunswick; de là, dans une direction nord-ouest en suivant à peu près la route n° 2 jusqu'aux environs de Rivière-du-Loup; de là, dans une direction sud-ouest en suivant à peu près la route n° 2 et en passant près de Sainte-Anne-de-la-Pocatière et de Montmagny jusqu'à un point au sud-est de Lauzon; de là, en contournant Lévis au sud jusqu'à une traversée de la rivière Chaudière près de Charny; de là, dans une direction sud-ouest en suivant à peu près la route n° 9 et en passant près de Drummondville jusqu'à un point au nord-est de Saint-Hyacinthe; de là, dans une direction ouest en suivant un nouveau tracé jusqu'à une traversée du fleuve Saint-Laurent aux îles de Boucheville et jusqu'à une jonction avec le boulevard Métropolitain, de là, jusqu'à une traversée de la baie de Vaudreuil à l'île aux Tourtes et jusqu'à une jonction avec le nouveau parcours de la route n° 17; de là, en suivant à peu près la route n° 17 jusqu'à la limite entre le Québec et l'Ontario.

Woodstocks jusqu'à la jonction des routes provinciales n°s 2 et 2B; de là, en passant sur la route n° 2B jusqu'à la jonction des routes n°s 2 et 2B à un mille au sud de Hartland, de là, en passant sur la route n° 2 via Hartland, Peel, Stickney, East Florenceville, Bristol, Bath, Upper Kent, Kilbuck, Green Andover, Aroostook, Grand-Falls, Saint-Léonard, Green River, Saint-Basile, Edmundston, Saint-Jacques jusqu'au point de croisement de la route provinciale n° 2 et de la frontière de Québec.

Parcours de la route—Liste A »

La route mentionnée à la liste "A" de chaque convention provinciale peut être décrite comme il suit :

TERRE-NEUVE—A partir de la ville de Saint-Jean via Holyrood, Briggs Junction, Whitbourne, Chappel Arm, Goobies, Clarenville, Port Blanford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre-Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, extrémité nord du lac Sandy, Deer Lake, Corner Brook, côté est du lac George, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins jusqu'à Port-aux-Basques.

ILE-DU-PRINCE-ÉDOUARD—A partir du passage d'eau des îles Wood, qui est le terminus du passage d'eau entre l'île du Prince-Édouard et la Nouvelle-Écosse, puis de là, en passant par Milliview jusqu'à la limite est de la ville de Charlottetown; ensuite, à partir de la limite nord de la ville de Charlottetown en passant par Cornwall, Bonshaw, Tryon, jusqu'à la ville de Borden qui est le terminus, sur l'île du Prince-Édouard, du passage d'eau entre l'île et Cape Tormentine (N.-B.).

NOUVELLE-ÉCOSSE—A partir de la frontière qui sépare le Nouveau-Brunswick de la Nouvelle-Écosse jusqu'à Oxford, de là, en passant sur la route 4 jusqu'au détroit de Canso et traversant le détroit sur la chaussée qui conduit à Port Hastings; de là, via Whybocomagh, Baddeck et Little Bras-d'Or jusqu'au terminus du passage d'eau de Terre-Neuve à North Sydney.

NOUVEAU-BRUNSWICK—A partir du point de croisement de la route provinciale n° 2 et de la frontière entre la Nouvelle-Écosse et le Nouveau-Brunswick, en se dirigeant vers l'ouest jusqu'à Auñac, puis dans une direction est en passant par la route provinciale n° 16 jusqu'à Cape Tormentine où s'effectue le raccordement avec l'île du Prince-Édouard par la voie du passage d'eau, puis d'Auñac en passant sur la route provinciale n° 2 via Sackville, Dorchester, Upper Dorchester, Collège Bridge et Menamcook, afin de contourner Moncton au nord, et reprenant la route provinciale n° 2 près de River Glade jusqu'à Anagance, Penobscuis, puis évitant la ville de Sussex jusqu'à la jonction des routes n°s 2 et 9; de là, le long de la route provinciale n° 9 via Coles Island, Youngs Cove, Jemseg, Sheffield et Manguerville jusqu'à une traversée de la rivière Saint-Jean près de Lower St. Marys; de là, en contournant Frederickton jusqu'à la route provinciale n° 2 à environ deux milles à l'ouest de Frederickton; de là, en passant par Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, Meductic et

TABLEAU N° 6 — RÉSUMÉ DES PAIEMENTS FAITS AUX GOUVERNEMENTS PROVINCIAUX

Du 1^{er} avril 1963 au 31 mars 1964

<i>Province</i>	<i>Construction préalable</i>	<i>Construction provisoire</i>	<i>Nouvelle construction</i>	<i>Totaux</i>
Terre-Neuve.....	—	—	\$11,304,606.82	\$11,304,606.82
Ile-du-Prince-Édouard.....	—	—	1,003,942.04	1,003,942.04
Nouvelle-Écosse.....	—	—	882,307.95	882,307.95
Nouveau-Brunswick.....	—	—	5,051,224.62	5,051,224.62
Québec.....	—	—	8,006,350.60	8,006,350.60
Ontario.....	—	—	4,209,039.20	4,209,039.20
Manitoba.....	—	—	59,619.84	59,619.84
Saskatchewan.....	—	—	2,385.42	2,385.42
Alberta.....	—	—	245,772.69	245,772.69
Colombie-Britannique.....	—	—	8,475,034.77	8,475,034.77
Totaux.....	—	—	\$39,240,283.95	\$39,240,283.95

Du 10 décembre 1949 au 31 mars 1964

<i>Province</i>	<i>Construction préalable</i>	<i>Construction provisoire</i>	<i>Nouvelle construction</i>	<i>Totaux</i>
Terre-Neuve.....	—	\$ 156,445.23	\$ 40,821,352.69	\$ 40,977,797.92
Ile-du-Prince-Édouard.....	\$ 288,383.09	—	6,612,864.24	6,901,247.33
Nouvelle-Écosse.....	88,501.37	—	17,338,626.33	17,427,127.70
Nouveau-Brunswick.....	1,447,800.14	193,576.71	40,966,091.88	42,607,468.73
Québec.....	—	—	20,331,139.36	20,331,139.36
Ontario.....	3,565,543.48	299,790.79	111,716,057.13	115,581,391.40
Manitoba.....	887,446.75	17,958.54	17,483,745.95	18,389,151.24
Saskatchewan.....	270,753.29	3,103.38	15,133,947.75	15,407,804.42
Alberta.....	475,943.78	14,975.87	21,246,438.11	21,737,357.76
Colombie-Britannique.....	3,190,102.08	692,171.05	110,498,466.03	114,380,739.16
Totaux.....	\$10,214,473.98	\$1,378,021.57	\$402,148,729.47	\$413,741,225.02

TABLEAU N° 5—RÉSUMÉ DES ENGAGEMENTS CONTRACTUELS

Du 1^{er} avril 1963 au 31 mars 1964

<i>Province</i>	<i>Montant total des engagements approuvés</i>	<i>Part du Canada</i>
Terre-Neuve.....	\$42,026,896.79	\$37,924,167.11
Ile-du-Prince-Edouard.....	1,264,025.00	1,185,732.50
Nouvelle-Ecosse.....	1,216,489.53	982,557.17
Nouveau-Brunswick.....	7,337,463.54	6,147,968.12
Québec.....	20,141,159.43	14,263,455.04
Ontario.....	1,103,556.52	1,773,905.72
Manitoba.....	37,100.00	33,390.00
Saskatchewan.....	47,100.00	23,550.00
Alberta.....	92,650.00	46,325.00
Colombie-Britannique.....	7,528,636.94	3,869,303.76
Totaux.....	\$78,587,964.71	\$62,702,542.98

Du 10 décembre 1949 au 31 mars 1964

<i>Province</i>	<i>Montant total des engagements approuvés</i>	<i>Part du Canada</i>
Terre-Neuve.....	\$ 96,058,477.44	\$ 71,040,300.58
Ile-du-Prince-Edouard.....	10,676,328.16	7,313,721.19
Nouvelle-Ecosse.....	27,392,944.76	19,023,881.41
Nouveau-Brunswick.....	66,734,060.47	43,676,447.66
Québec.....	69,539,323.74	45,406,222.11
Ontario.....	223,475,781.33	125,813,594.97
Manitoba.....	35,159,773.14	20,732,638.11
Saskatchewan.....	28,266,950.32	16,177,820.17
Alberta.....	37,522,057.57	22,517,630.16
Colombie-Britannique.....	211,502,375.30	121,062,402.93
Totaux.....	\$806,308,072.23	\$492,764,569.29

TABLEAU N° 4—RAPPORT SUR LE TRAVAIL

Jours-homme (8 heures) de travail à pied d'oeuvre sur la route transcanadienne
Du 1^{er} avril 1963 au 31 mars 1964

<i>Province</i>	<i>Travail de génie sur place</i>	<i>Surveillance de la construction</i>	<i>Travaux de construction</i>	<i>Totaux</i>
Terre-Neuve.....	21,047	15,550	107,457	144,054
Ile-du-Prince-Edouard..	3,288	1,269	12,687	17,244
Nouvelle-Ecosse.....	8,226	1,691	10,386	20,303
Nouveau-Brunswick....	13,228	4,477	61,326	79,031
Québec.....	2,177	9,240	15,093	26,510
Ontario.....	38,945	12,031	113,164	164,140
Manitoba.....	—	—	—	—
Saskatchewan.....	59	61	316	436
Alberta.....	29	129	337	495
Colombie-Britannique....	27,564	15,004	109,634	152,202
Parc de Terra Nova....	61	—	—	61
Parcs de Banff et d'Yoho	7,526	107	625	8,258
Parcs de Glacier et de Revelstoke.....	4,770	1,509	8,644	14,923
Totaux.....	126,920	61,068	439,669	627,657

Remarque:—Le nombre total de jours-homme (8 heures) de travail hors chantier est évalué à 1,067,017 pour la même période.

Du 10 décembre 1949 au 31 mars 1964

<i>Province</i>	<i>Travail de génie sur place</i>	<i>Surveillance de la construction</i>	<i>Travaux de construction</i>	<i>Totaux</i>
Terre-Neuve.....	97,943	143,233	853,868	1,095,044
Ile-du-Prince-Edouard..	33,847	12,695	146,251	192,793
Nouvelle-Ecosse.....	99,942	52,111	395,068	547,121
Nouveau-Brunswick....	140,821	65,953	692,795	899,569
Québec.....	13,418	20,481	41,253	75,152
Ontario.....	742,071	612,228	3,245,581	4,599,880
Manitoba.....	61,189	35,634	367,653	464,476
Saskatchewan.....	143,700	91,861	431,771	667,332
Alberta.....	79,212	40,815	326,630	446,657
Colombie-Britannique....	345,214	331,502	1,805,765	2,482,481
Parc de Terra Nova....	66,620	16,191	174,086	256,897
Parcs de Banff et d'Yoho	147,585	42,406	283,102	473,093
Parcs de Glacier et de Revelstoke.....	135,681	28,288	260,751	424,720
Totaux.....	2,107,243	1,493,398	9,024,574	12,625,215

Remarque:—Le nombre total de jours-homme (8 heures) de travail hors chantier est évalué à 21,462,866 pour la même période.

TABLEAU N° 3—PAVAGE

Du 1^{er} avril 1963 au 31 mars 1964

Province
Milles de pavage
dont on a approu-
vé les contrats
Nombre de
milles ter-
minés

Terre-Neuve.....	86	81
Ile-du-Prince-Edouard.....	—	—
Nouvelle-Ecosse.....	—	3
Nouveau-Brunswick.....	3	16
Québec.....	55	16
Ontario.....	21	24
Manitoba.....	—	—
Saskatchewan.....	—	—
Alberta.....	—	—
Colombie-Britannique.....	67	67
Parc de Terra Nova.....	—	—
Parcs de Banff et d'Yoho.....	—	—
Parcs de Glacier et de Revelstoke.....	—	—
Totaux.....	232	207

Du 10 décembre 1949 au 31 mars 1964

Province
Milles de pavage
dont on a approu-
vé les contrats
Nombre de
milles ter-
minés

Terre-Neuve.....	319	253
Ile-du-Prince-Edouard.....	71	71
Nouvelle-Ecosse.....	122	122
Nouveau-Brunswick.....	229	229
Québec.....	71	22
Ontario.....	1,065	1,045
Manitoba.....	309	309
Saskatchewan.....	406	406
Alberta.....	281	281
Colombie-Britannique.....	544	536
Parc de Terra Nova.....	25	25
Parcs de Banff et d'Yoho.....	80	80
Parcs de Glacier et de Revelstoke.....	35	35
Totaux.....	3,557	3,414

TABLEAU N° 2—NIVELLEMENT
Du 1er avril 1963 au 31 mars 1964

<i>Milles de nivellement</i>	<i>Province</i>
<i>Nombre de</i>	
<i>milles ter-</i>	
<i>minés</i>	
<i>dont on a approuvé</i>	
<i>les contrats</i>	

45	Terre-Neuve.....	204*
—	Ile-du-Prince-Édouard.....	—
2	Nouvelle-Écosse.....	7
36	Nouveau-Brunswick.....	38
49	Québec.....	26
36	Ontario.....	28
—	Manitoba.....	—
—	Saskatchewan.....	—
—	Alberta.....	—
19	Colombie-Britannique.....	14
—	Parc de Terra Nova.....	—
—	Parcs de Banff et d'Yoho.....	—
—	Parcs de Glacier et de Revelstoke.....	—
187	Totaux.....	317

Du 10 décembre 1949 au 31 mars 1964

Milles de nivellement
dont on a approuvé
milles ter-
minés
Province
les contrats

365	Terre-Neuve.....	524
71	Ile-du-Prince-Édouard.....	71
133	Nouvelle-Écosse.....	139
269	Nouveau-Brunswick.....	273
126	Québec.....	167
1, 138	Ontario.....	1, 158
250	Manitoba.....	250
406	Saskatchewan.....	406
281	Alberta.....	281
550	Colombie-Britannique.....	550
25	Parc de Terra Nova.....	25
80	Parcs de Banff et d'Yoho.....	80
35	Parcs de Glacier et de Revelstoke.....	35
3, 729	Totaux.....	3, 959

*Y compris 87 milles de routes où l'on a procédé à la finition du nivellement qui avait été commencé par des travailleurs à la journée fournis par la province.

Nombre total de milles de route désignée, de milles carrossables et de milles pavés aux termes du nouvel accord

TABEAU N° 1

<i>Province</i>	<i>Nombre de milles</i>	<i>Nombre approximatif de milles carrossables</i>	<i>Nombre de milles pavés¹</i>
Terre-Neuve.....	540	540	267
Ile-du-Prince-Édouard.....	71	71	71
Nouvelle-Écosse.....	318	318	303
Nouveau-Brunswick.....	390	390	340
Québec.....	399	399	308
Ontario.....	1,453	1,453	1,269
Manitoba.....	309	309	309
Saskatchewan.....	406	406	406
Alberta.....	282	282	282
Colombie-Britannique.....	552	552	536
Parcs nationaux.....	140	140	140
Totaux.....	4,860	4,860	4,231

1. Y compris le nombre de milles de route tracée, pavés avant le 12 décembre 1949.

tion se soit ensuite poursuivie à un rythme accéléré, la plupart des provinces ont éprouvé des difficultés à affecter, dans le cadre de leur budget annuel, les sommes nécessaires aux travaux qui auraient permis d'achever la route dans le délai de sept ans stipulé à la Loi de 1949. Lors d'une conférence fédérale-provinciale sur les routes, tenue en novembre 1955, on a débattu la question du nombre de milles non terminés. Les décisions prises à cette conférence ont abouti à une modification de la Loi sur la route transcanadienne, apportée en 1956. Cette modification donnait plus d'ampleur à la contribution du Canada au coût de la construction en autorisant un apport contributif supplémentaire de 40 p. 100 à l'égard d'un dixième du nombre de milles de la route dans chaque province. On a prolongé la période de construction jusqu'au 31 décembre 1960 et porté à \$250 millions le montant global que le Canada pouvait dépenser à cet égard.

Aux termes de la loi modifiée, de nouveaux accords ont été conclus avec chacune des provinces participantes. Ces accords stipulaient que la route devait être terminée pour le 31 décembre 1960 en conformité du devis général de la liste "B", ou qu'elle devait répondre aux normes d'une bonne route pavée. Cette stipulation écartait la nécessité pour une province de reconstruire des tronçons de route qui étaient déjà pavés selon des normes provinciales satisfaisantes et permettait d'accélérer le travail aux tronçons où la reconstruction et le pavage étaient plus impérieux.

De nouvelles lois promulguées en 1959 et en 1960 ont prolongé la période de construction jusqu'au 31 décembre 1963 et ont porté la contribution du Canada à un maximum de \$400 millions.

La Province de Québec a conclu un accord sur la route transcanadienne le 27 octobre 1960.

En 1963, le Parlement a permis de prolonger la période de construction jusqu'au 31 décembre 1967 et d'accroître la contribution du Canada à un maximum de \$625 millions. Cette loi stipule aussi que le Gouvernement fédéral paierait 90 p. 100 du coût de construction de la route dans les provinces Maritimes, à partir du 1er avril 1963.

Les appendices "A" et "B" du présent rapport contiennent des aperçus des listes "A" et "B" des accords avec les provinces. La liste "A" donne le parcours de la route dans chaque province et la liste "B" renferme le devis général.

STATISTIQUE DE LA ROUTE

Les tableaux qui suivent contiennent des données statistiques sur l'état d'avancement de la route depuis le 10 décembre 1949 jusqu'au 31 mars 1964 et comprennent des renseignements qui touchent particulièrement à l'année financière dont le présent rapport fait l'objet.

Les travaux n'ont comporté, en 1963-1964, que l'ensemencement et le nettoyage le long de la route.

Parcs nationaux de Banff et d'Yoho

Dans le parc national de Banff, on a terminé le pavage de l'échangeur Eisenhower. On a aussi fini d'installer les garde-fous, les panneaux indicateurs, de peindre les marques sur la chaussée, et on a fait un nettoyage général au cours de la saison 1963-1964.

On a terminé le revêtement, en 1963, sur une longueur de 12.4 milles de route. Ainsi se trouvent terminés les travaux de pavage dans le parc national d'Yoho.

Parcs nationaux de Glacier et de Revelstoke

La construction de pare-neige s'est poursuivie et l'on a adjugé un contrat pour le tronçon de Tupper Timber et extension jusqu'à Len. Le coût en sera d'environ \$1 million. On a en outre adjugé un contrat pour des ouvrages de protection contre les avalanches, notamment pour la construction de murs de soutènement et de fossés de dérivation là où les pare-neige n'étaient pas nécessaires.

Les travaux prévus au contrat pour l'installation de garde-fous dans les deux parcs nationaux de Glacier et de Revelstoke ont été achevés en 1963-1964. On a aussi fait un nettoyage général.

LA LOI SUR LA ROUTE TRANSCANADIENNE

Les accords initiaux sur la construction de la route prévus à la Loi de 1949 sur la route transcanadienne (2e session), chapitre 40, article 1, ont été conclus avec les provinces de l'Ontario, de la Saskatchewan et de l'Alberta le 24 avril 1950, avec la province du Nouveau-Brunswick le 27 mai 1950, avec la province de Terre-Neuve le 23 juin 1950 et avec la province de la Nouvelle-Ecosse le 15 mai 1952.

Selon les termes des accords initiaux, et aussi de la Loi, une route pavée dont le tracé s'étendrait de la côte est à la côte ouest du Canada devait être construite et terminée pour le 9 décembre 1956. Les accords stipulaient en outre que le Canada acquitterait 50 p. 100 du coût de toute nouvelle construction et jusqu'à concurrence de 50 p. 100 du coût des tronçons de routes construits antérieurement pourvu que ces tronçons fissent bien partie de la route transcanadienne. Le montant global de la contribution du Canada était limité, aux termes de la Loi, à \$150,000,000.

La loi stipulait également que le ministre pouvait payer à même les fonds affectés par le Parlement les frais de construction des routes traversant les parcs et faisant partie d'une route transcanadienne.

Aux premiers stades du projet, les provinces en général ont eu à faire face à maints problèmes relatifs à l'extension du programme de construction. Les travaux ont démarré lentement en 1950 et, bien que la construc-

RAPPORT

SUR LES TRAVAUX EXÉCUTÉS EN CONFORMITÉ DE LA LOI SUR LA ROUTE TRANS-CANADIENNE

POUR L'ANNÉE FINANCIÈRE TERMINÉE LE 31 MARS 1964

ÉTAT D'AVANCEMENT DE LA CONSTRUCTION

On a marqué de grands progrès dans la réalisation des travaux importants de la route transcanadienne, comme le pont de Port Mann en Colombie-Britannique et le pont-tunnel du fleuve Saint-Laurent à Montréal. Il découle des statistiques qu'il y a eu en outre une augmentation sensible dans le nombre de projets entrepris dans les provinces de l'Atlantique.

Le nombre de milles de la route pour lequel on avait approuvé le nombre de milles pour lequel on avait approuvé le pavage atteint 3,557, dont 3,414 sont finis. Des 699 ouvrages d'art dont on a approuvé la construction, 648 sont achevés.

Les travaux approuvés, à exécuter par les gouvernements provinciaux en vertu de contrats passés pour la construction de la route transcanadienne de décembre 1949 au 31 mars 1964, se sont élevés à \$806,308,072.23. Les dépenses engagées pour l'année financière ont atteint \$78,587,964.71. La part du Canada relativement aux dépenses de l'exercice financier 1963-1964 est évaluée à \$62,802,542.98. Les paiements effectués aux provinces au cours de l'exercice ont formé la somme de \$39,240,283.95.

Les rapports provinciaux indiquent que la construction de la route a demandé 627,657 jours-homme (8 heures) de travail au cours de l'année financière. On évalue à 1,067,017 jours-homme supplémentaires le travail hors chantier représenté par la fourniture de matériaux et de services. Le total estimatif de jours-homme de travail à pied d'œuvre qu'a comporté la construction de la route à ce jour est évalué à 12,626,215.

ROUTE TRANS-CANADIENNE TRAVERSANT LES PARCS NATIONAUX

C'est à la Direction du génie (aménagement) du ministère des Travaux publics que l'on doit la construction d'environ 140 milles de routes transcanadiennes qui se trouvent dans les limites de cinq parcs nationaux.

Le détail des travaux entrepris dans chacun des parcs nationaux au cours de la période de construction de 1963 est le suivant:

TABLE DES MATIÈRES

PAGE	
1	ÉTAT D'AVANCEMENT DE LA CONSTRUCTION.....
1	ROUTE TRANSCANADIENNE TRAVERSANT LES PARCS NATIONAUX.....
2	LOI SUR LA ROUTE TRANSCANADIENNE.....
	STATISTIQUE DE LA ROUTE
4	Tableau 1—Nombre de milles, etc.....
5	Tableau 2—Nivellement.....
6	Tableau 3—Pavage.....
7	Tableau 4—Rapport sur le travail.....
8	Tableau 5—Résumé des engagements contractuels.....
9	Tableau 6—Résumé des paiements faits aux gouvernements provinciaux.....
	APPENDICES
10	A—Liste A—Parcours de la route.....
14	B—Liste B—Devis général.....
16	C—Ingénieurs régionaux fédéraux.....

Sous-ministre.

LUCIEN LALONDE,

Votre obéissant serviteur,

J'ai l'honneur de vous soumettre le quinzième rapport annuel sur les travaux exécutés en conformité de la Loi sur la route trans-canadienne, chapitre 269, Statuts révisés du Canada (1952), pour l'année financière terminée le 31 mars 1964.

Monsieur,

L'honorable JEAN-PAUL DESCHATELETS,
Ministre des travaux publics,
OTTAWA.

Respectueusement soumis
 JEAN-PAUL DESCHATELLETS,
Ministre des Travaux publics.

Excellence,
 Le sousigné a l'honneur de présenter à Votre Excellence le rapport annuel sur les travaux exécutés en conformité de la Loi sur la route transcanadienne, chapitre 269, Statuts révisés du Canada (1952), pour l'année financière terminée le 31 mars 1964.

A son Excellence le major-général
 GEORGES-P. VANIER, D.S.O., M.C., C.D.,
 Gouverneur général et Commandant en chef du
 Canada.

No de catalogue W41-1964P

1964

OTTAWA, CANADA

IMPRIMEUR DE LA REINE ET CONTRÔLEUR DE LA PAPERIE
ROGER DUHAMEL, M.S.R.C.

Publication autorisée par
L'HONORABLE JEAN-PAUL DESCHATELETS
Ministre des Travaux publics
OTTAWA

Année financière terminée le
31 MARS 1964

LA LOI SUR LA ROUTE TRANSCANADIENNE

TRAVAUX EXÉCUTÉS EN CONFORMITÉ DE

RAPPORT ANNUEL

MINISTÈRE DES TRAVAUX PUBLICS
DIRECTION DU GÉNIE (AMÉNAGEMENT)



Ministère des Travaux Publics

ROUTE TRANSCANADIENNE

**Rapport annuel pour l'année
financière terminée le 31 mars
1964**

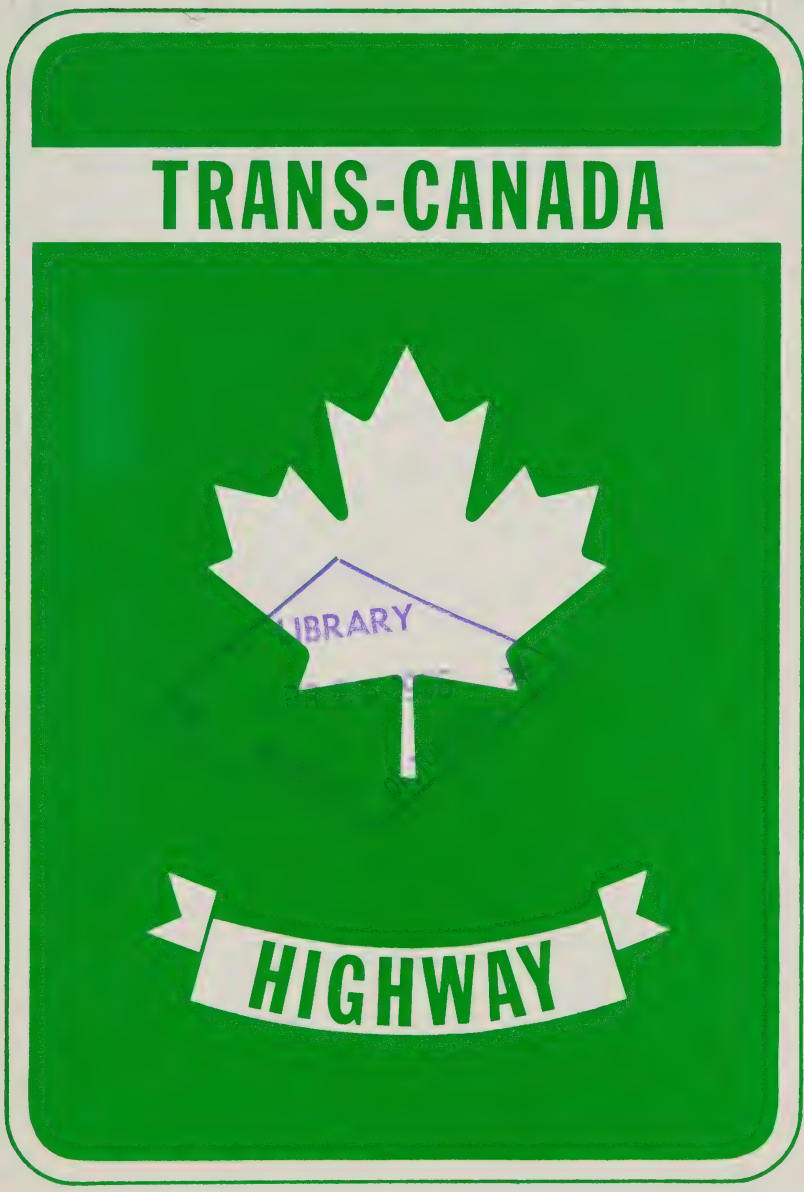
2A1 PW 41

A55

Department of Public Works

(CANADA)

Report of proceedings under the Trans-Canada Highway Act



Annual Report For The
Fiscal Year Ended March 31

1965



annual report

Department of public works
Development Engineering
Branch

proceedings
under the

trans-Canada highway act

Fiscal year ended

March 31, 1965

Issued under the Authority of
the Honourable Lucien Cardin
Minister of Public Works
Ottawa

©
ROGER DUHAMEL, F.R.S.C.
Queen's Printer and Controller of Stationery
Ottawa, 1966

Cat. No.: W41-1965

To His Excellency Major-General
GEORGES P. VANIER, D.S.O., M.C., C.D.,
Governor-General and Commander-in-Chief
of Canada

May it please Your Excellency:

The undersigned has the honour to lay before
Your Excellency the Annual Report of
Proceedings under the Trans-Canada Highway
Act, Chapter 269, Revised Statutes of Canada,
(1952), for the fiscal year ended March 31st,
1965.

Respectfully submitted,
LUCIEN CARDIN
Minister of Public Works.

The Honourable LUCIEN CARDIN
Minister of Public Works,
Ottawa

Sir:

I have the honour to submit the sixteenth
Annual Report of Proceedings Under the
Trans-Canada Highway Act, Chapter 269,
Revised Statutes of Canada, (1952), for the
fiscal year ended March 31st, 1965.

Your obedient servant,

LUCIEN LALONDE

Deputy Minister

contents

- 9 THE TRANS-CANADA HIGHWAY ACT
- 10 CONSTRUCTION PROGRESS
- 11 TRANS-CANADA HIGHWAY IN NATIONAL PARKS
- 12 HIGHWAY STATISTICS
 - Table 1 - Mileage, etc.
 - Table 2 - Grading construction
 - Table 3 - Paving construction
 - Table 4 - Labour Report
 - Table 5 - Summary of Contractual Commitments
 - Table 6 - Summary of Payments to Provincial Governments
 - Graph 1 - Contractual Commitments and Payments
 - Graph 2 - Mileage Constructed
- 21 APPENDICES
 - 21 A - Schedule A - Route of Highway
 - 25 B - Schedule B - General Specifications
 - 27 C - Federal District Engineers

**Report of proceedings
under the Trans-Canada Highway Act
FOR THE FISCAL YEAR ENDED MARCH 31, 1965**

THE TRANS-CANADA HIGHWAY ACT

The original agreements covering the construction of the Highway, as provided for in the Trans-Canada Highway Act 1949 (2nd Sess.), C.40, S.I. were executed with the Provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta on April 24, 1950, with the Province of New Brunswick on May 27, 1950, the Province of Newfoundland on June 23, 1950 and with the Province of Nova Scotia on May 15, 1952.

These original agreements provided, as did the Act, for a paved highway across Canada by December 9, 1956. They also provided that Canada would contribute 50 per cent of the cost of new construction and up to 50 per cent of the cost of previously constructed sections of the highway where these sections were properly incorporated in the Trans-Canada Highway. Canada's total contribution under the Act was limited to \$150 million.

The Act also provided that the Minister might, out of monies appropriated by Parliament, provide for the construction of such highways within the National Parks as form part of a Trans-Canada Highway.

In the early stages of the project, the Provinces generally experienced many problems in connection with the enlarged construction program. The work began slowly in 1950 and, although construction continued to a high standard, most provinces found it difficult to provide, in their yearly programs, for the work necessary to ensure the completion of the Highway within the seven-year period covered by the Act of 1949. The uncompleted mileage was the subject of discussion at a Federal-Provincial Highway Conference in November 1955. The decisions reached during that Conference resulted in a 1956 Amendment of the Trans-Canada Highway Act. The enactment of this amendment increased the extent of Canada's contribution to

the cost of the highway by providing for an additional 40 per cent contribution to the cost of construction on one-tenth of the highway mileage in each Province. The construction period was extended to the 31st day of December, 1960, and the aggregate limit of the funds, available for expenditure by Canada was increased to \$250 million.

New agreements under the amended Act were entered into with each of the participating provinces. These agreements provided that by the 31st day of December, 1960, the highway should be completed in conformity with the general specifications of Schedule "B", or that it should constitute a good standard of paved highway. This provision eliminated the necessity of a Province reconstructing sections of the highway which were already paved to a satisfactory provincial standard and made it possible to speed up the work on those sections where reconstruction and paving were most essential.

Legislation passed in 1959 and 1960 extended the construction period to December 31, 1963 and increased the amount of Canada's contribution to a maximum of \$400 million.

The Province of Quebec became party to a Trans-Canada Highway Agreement on October 27, 1960.

Legislative authority was provided in 1963 for an extension of the construction period to December 31, 1967, and allowed for federal contributions up to \$625 million. It also provided for payment by Canada of 90 per cent of construction costs incurred by the Atlantic provinces from April 1, 1963.

Appendices "A" and "B" of the report contain outlines of Schedules "A" and "B" of the Agreements with the provinces. Schedule "A" designates the route of the Highway within each province and Schedule "B" the general specifications.

CONSTRUCTION PROGRESS

The fiscal year set records both in the value of new Trans-Canada Highway work approved—more than \$117,000,000—and in the total of federal contributions towards work done—\$76,000,000.

Canada's estimated share on approved work increased by \$94,000,000 to more than \$500,000,000.

The mileage of the Highway approved for grading to March 31, 1965, totals 4,116 of which 3,997 miles were completed. The mileage approved for paving totalled 3,910 of which 3,645 miles were completed. Structures approved for construction totalled 779 of which 699 have been completed.

Provincial reports show that the construction of the Highway provided 1,597,296 man days (8 hours) of employment during the fiscal year. Off-site labour created by the supply of materials and services is estimated at an additional 2,715,403 man days. The total estimated man days of on-site employment provided by the construction of the Highway to date is estimated at 14,222,511.

TRANS-CANADA HIGHWAY IN NATIONAL PARKS

The Development Engineering Branch of the Department of Public Works is directly responsible for construction of approximately 140 miles of highway within the boundaries of five National Parks. Most of the work now has been completed except for final pavement which is to be done at a later date and minor modifications to improve drainage. The avalanche zone in Glacier Park is at present under study in order to assess the efficacy of existing protection. Details of the work program undertaken during the 1964 construction season follows:

Yoho National Park

Work consisted of a minor settlement correction on the approaches of the Ottertail River Bridge.

Glacier National Park

Started in 1963, two snowsheds—Tupper Timber and extension to Len's—were completed by July 1964. Special avalanche defences at Mile 4.6 and 4.7 were also constructed during the year. A contract was awarded for the stone facing of the Pioneer #1 Snowshed.

Revelstoke National Park

Work was confined to seeding operation and slope stabilization.

HIGHWAY STATISTICS

The following tables and graphs furnish a statistical report of progress on the Highway from December 10, 1949 to March 31, 1965 and include information pertaining specifically to the fiscal year under review.

table no. 1

Total Mileage
of Designated Route
and Paved Mileage

Province	<i>Total Mileage</i>	<i>Paved Mileage (Note 1)</i>
Newfoundland	540	319
Prince Edward Island	71	71
Nova Scotia	318	228
New Brunswick	390	340
Quebec	399	330
Ontario	1,453	1,403
Manitoba	309	309
Saskatchewan	406	406
Alberta	282	282
British Columbia	552	550
National Parks	140	140
Totals	4,860	4,378

(1) Includes mileage on designated route paved prior to December 10, 1949.

The difference between "Paved Mileage" and "Total Mileage" indicates the mileage under construction. Travel is possible through-out, either on sections under construction or on alternative routes in the vicinity.

table no. 2 grading construction

1 April, 1964 to 31 March, 1965

Province	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland	15	142
Prince Edward Island	—	—
Nova Scotia	46	27
New Brunswick	32	29
Quebec	16	35
Ontario	48	45
Manitoba	—	—
Saskatchewan	—	—
Alberta	—	—
British Columbia	—	—
Terra Nova Park	—	—
Banff & Yoho Parks	—	—
Glacier & Revelstoke Parks	—	—
Totals	157	278

10 December, 1949 to 31 March, 1965

Province	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland	539	507
Prince Edward Island	71	71
Nova Scotia	185	160
New Brunswick	305	298
Quebec	183	161
Ontario	1,206	1,173
Manitoba	250	250
Saskatchewan	406	406
Alberta	281	281
British Columbia	550	550
Terra Nova Park	25	25
Banff & Yoho Parks	80	80
Glacier & Revelstoke Parks	35	35
Totals	4,116	3,997

table no. 3 paving construction

1 April, 1964 to 31 March, 1965

Province	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland	220	66
Prince Edward Island	—	—
Nova Scotia	—	—
New Brunswick	41	41
Quebec	75	87
Ontario	11	23
Manitoba	—	—
Saskatchewan	—	—
Alberta	—	—
British Columbia	6	14
Terra Nova Park	—	—
Banff and Yoho Parks	—	—
Glacier and Revelstoke Parks	—	—
Totals	353	231

10 December, 1949 to 31 March, 1965

Province	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland	539	319
Prince Edward Island	71	71
Nova Scotia	122	122
New Brunswick	270	270
Quebec	146	109
Ontario	1,076	1,068
Manitoba	309	309
Saskatchewan	406	406
Alberta	281	281
British Columbia	550	550
Terra Nova Park	25	25
Banff and Yoho Parks	80	80
Glacier and Revelstoke Parks	35	35
Totals	3,910	3,645

table no. 4 labour report

Man days (8 hours) "On Site" Work on Trans-Canada Highway
1 April, 1964 to 31 March, 1965

Province	Field Engineering	Construction Supervision	Construction Work	Totals
Newfoundland	44,476	56,887	392,867	494,230
Prince Edward Island	4,196	931	9,313	14,440
Nova Scotia	16,560	5,808	58,520	80,888
New Brunswick	21,673	8,768	90,792	121,233
Quebec	123,419	208,571	385,745	717,735
Ontario	26,275	12,141	79,696	118,112
Manitoba	—	—	—	—
Saskatchewan	75	35	302	412
Alberta	—	—	—	—
British Columbia	8,218	4,126	27,683	40,027
Terra Nova Park	—	—	—	—
Banff and Yoho Parks	1,336	364	46	1,746
Glacier and Revelstoke Parks	3,900	724	3,849	8,473
Totals	250,128	298,355	1,048,813	1,597,296

Note: The total number of man days (8 hours) of "Off Site" Labour is estimated at 2,715,403 for the same period.

10 December, 1949 to 31 March, 1965				
Province	Field Engineering	Construction Supervision	Construction Work	Totals
Newfoundland	142,419	200,120	1,246,735	1,589,274
Prince Edward Island	38,043	13,626	155,564	207,233
Nova Scotia	116,502	57,919	453,588	628,009
New Brunswick	162,494	74,721	783,587	1,020,802
Quebec	136,837	229,052	426,998	792,887
Ontario	768,346	624,369	3,325,277	4,717,992
Manitoba	61,189	35,634	367,653	464,476
Saskatchewan	143,775	91,896	432,073	667,744
Alberta	79,212	40,815	326,630	446,657
British Columbia	353,432	335,628	1,833,448	2,522,508
Terra Nova Park	66,620	16,191	174,086	256,897
Banff and Yoho Parks	148,921	42,770	283,148	474,839
Glacier and Revelstoke Parks	139,581	29,012	264,600	433,193
Totals	2,357,371	1,791,753	10,073,387	14,222,511

Note: The total number of man days (8 hours) of "Off Site" Labour is estimated at 24,178,269 for the same period.

table no. 5 summary of contractual commitments

1 April, 1964 to 31 March, 1965

Province	<i>Total Commitment Approved</i>	<i>Canada's Share</i>
Newfoundland	\$ 21,848,226.51	\$19,673,302.99
Prince Edward Island	1,551,638.29	1,396,374.46
Nova Scotia	9,092,858.78	8,056,768.04
New Brunswick	12,558,712.65	11,270,048.65
Quebec	59,214,333.31	47,130,385.54
Ontario	6,682,773.09	3,330,983.56
Manitoba	911,823.85	475,241.46
Saskatchewan	29,634.27	14,817.35
Alberta	545,900.00	284,350.00
British Columbia	5,074,388.00	2,536,694.00
Totals	\$117,510,288.75	\$94,168,966.05

12 December, 1949 to 31 March, 1965

Province	<i>Total Commitment Approved</i>	<i>Canada's Share</i>
Newfoundland	\$117,906,703.95	\$ 90,713,603.57
Prince Edward Island	12,227,966.45	8,710,095.65
Nova Scotia	36,485,803.54	27,080,649.45
New Brunswick	79,292,773.12	54,946,496.31
Quebec	128,733,657.05	92,536,607.65
Ontario	230,158,554.42	129,144,578.53
Manitoba	36,071,596.99	21,207,879.57
Saskatchewan	28,296,584.59	16,192,637.52
Alberta	38,067,957.57	22,801,980.16
British Columbia	216,576,763.30	123,599,096.93
Totals	\$923,818,360.98	\$586,933,625.34

table no. 6 summary of payments to provincial governments

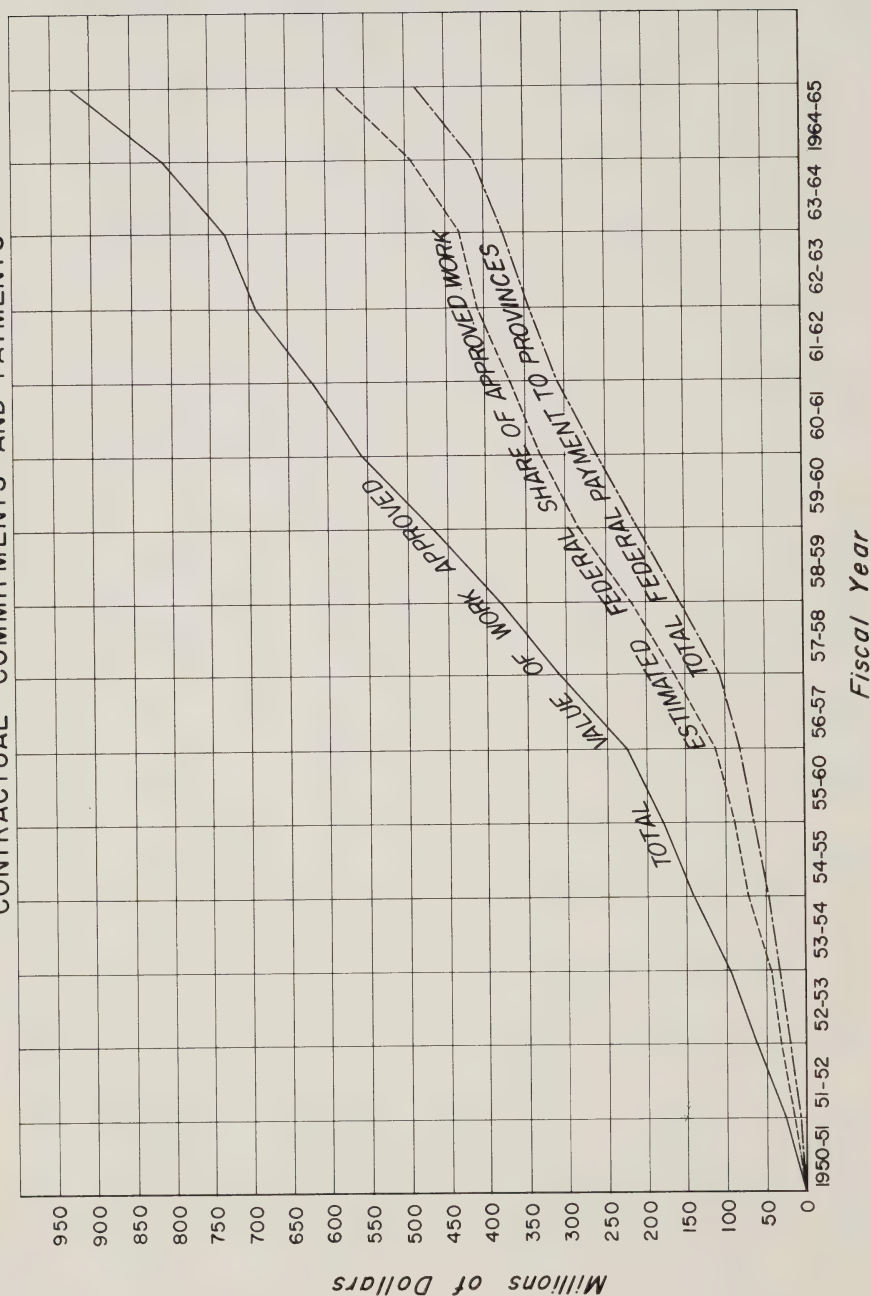
Province	Prior Construction	Interim Construction	New Construction	Totals
Newfoundland	—	—	\$22,765,152.13	\$22,765,152.13
Prince Edward Island	—	—	1,107,933.59	1,107,933.59
Nova Scotia	—	—	4,714,202.48	4,714,202.48
New Brunswick	—	—	8,046,357.70	8,046,357.70
Quebec	—	—	32,048,993.68	32,048,993.68
Ontario	—	—	3,689,809.40	3,689,809.40
Manitoba	—	—	208,580.99	208,580.99
Saskatchewan	—	—	38,624.08	38,624.08
Alberta	—	—	95,768.23	95,768.23
British Columbia	—	—	3,369,689.36	3,369,689.36
Totals	—	—	\$76,085,111.64	\$76,085,111.64

1 April 1964
to 31 March, 1965

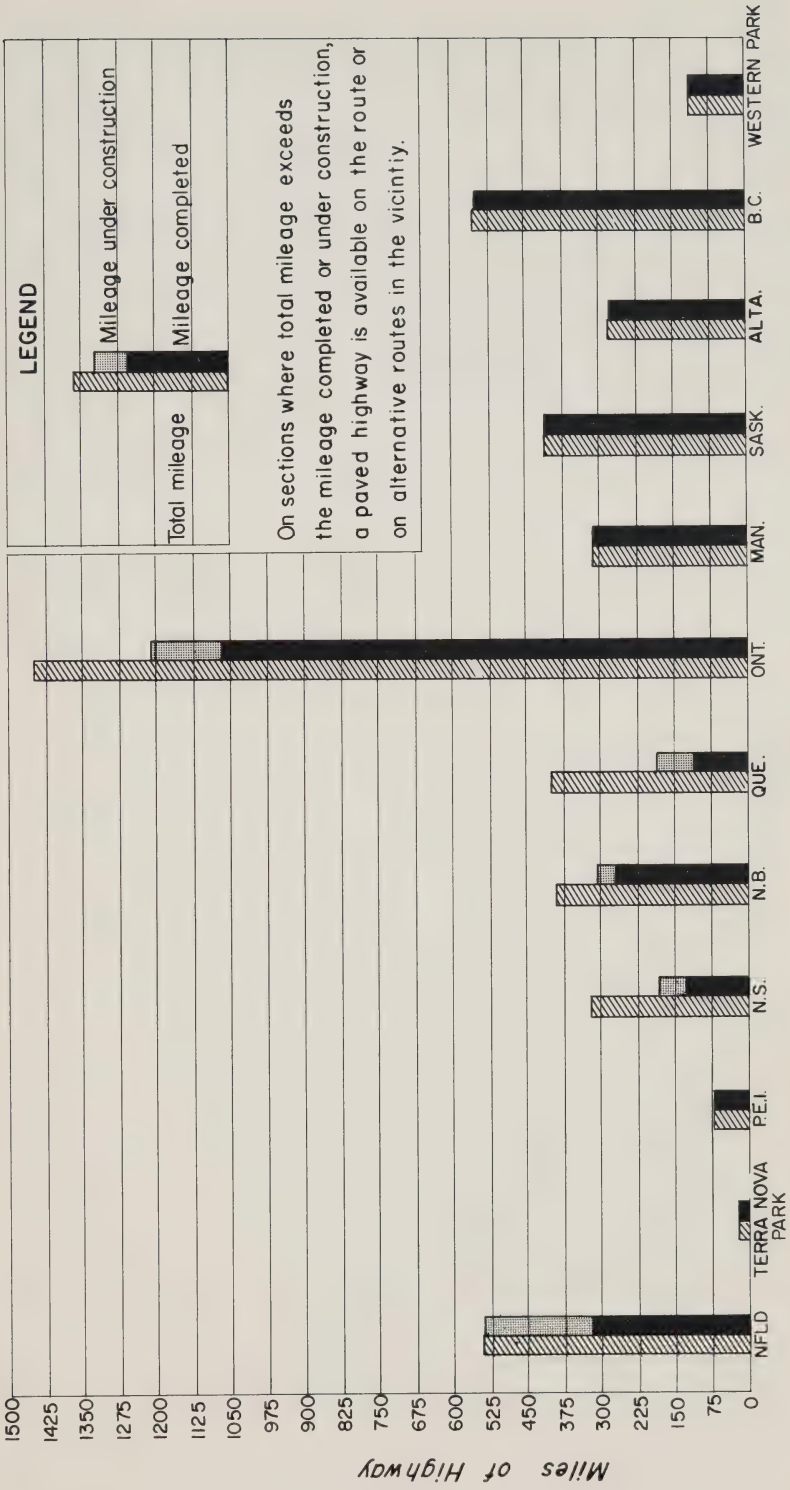
Province	Prior Construction	Interim Construction	New Construction	Totals
Newfoundland	—	\$156,445.23	\$63,586,504.82	\$ 63,742,950.05
Prince Edward Island	\$ 288,383.09	—	7,720,797.83	8,009,180.92
Nova Scotia	88,501.37	—	22,052,828.81	22,141,330.18
New Brunswick	1,447,800.14	193,576.71	49,012,449.58	50,653,826.43
Quebec	—	—	52,380,133.04	52,380,133.04
Ontario	3,565,543.48	299,790.79	115,405,866.53	119,271,200.80
Manitoba	887,446.75	17,958.54	17,692,326.94	18,597,732.23
Saskatchewan	270,753.29	3,103.38	15,172,571.83	15,446,428.50
Alberta	475,943.78	14,975.87	21,342,206.34	21,833,125.99
British Columbia	3,190,102.08	692,171.05	113,868,155.39	117,750,428.52
Totals	\$10,214,473.98	\$1,378,021.57	\$478,233,841.11	\$489,826,336.66

10 December, 1949
to 31 March, 1965

CONTRACTUAL COMMITMENTS AND PAYMENTS



MILEAGE OF HIGHWAY CONSTRUCTED
UNDER THE TRANS-CANADA HIGHWAY ACT AND AGREEMENTS



APPENDIX "A" Route of Highway — Schedule "A"

The route designated in Schedule "A" of each Provincial Agreement may be described as follows:

Newfoundland - From the city of St. John's via Holyrood, Brigus Junction, Whitbourne, Chapel Arm, Goobies, Clarendville, Port Blandford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, north end of Sandy Lake, Deer Lake, Corner Brook, east side of George's Lake, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins to Port aux Basques.

Prince Edward Island - Commencing at Wood Islands Ferry, the terminal of the Prince Edward Island-Nova Scotia Ferry, then through Millview to the east boundary of the city of Charlottetown; again from the north boundary of the city of Charlottetown through Cornwall, Bonshaw, Tyron, to the town of Borden, the Prince Edward Island terminal of the ferry system to Cape Tormentine, New Brunswick.

Nova Scotia - Generally from the New Brunswick - Nova Scotia Border to Oxford; thence via route 4 to the Strait of Canso, crossing the Strait via the Causeway to Port Hastings; thence via Whycocomagh, Baddeck and Little Bras d'Or to the Newfoundland Ferry Terminal at North Sydney also that portion of highway from Route 4 to Pictou and thence to the Prince Edward Island Ferry Terminal Caribou.

New Brunswick - Commencing at the intersection of provincial highway number two with the Nova Scotia - New Brunswick boundary; thence in a westerly direction to the village of Aulac, thence in an easterly direction along provincial highway No. 16, through the village of Pointe de Bute, Baie Verte, Port Elgin, Melrose, and Bayfield, to the Village of Cape Tormentine; again from the village of Aulac along provincial highway No. 2, through the town of Sackville; thence via a new location to Memramcook; thence via a new location which will by-pass Moncton to the north and rejoin provincial highway No. 2 near River Glade thence along provincial highway No. 2 through Anagance, Penobsquis, a diversion of the town of Sussex to the junction of provincial highways No's. 2 and 9; thence along provincial highway No. 9, through the villages of Coles Island, Youngs Cove, Jemseg, Sheffield, and Maugerville to a crossing of the St. John River near lower St. Marys; thence along a Fredericton diversion to provincial highway No. 2, about two miles west of

Fredericton; thence through the villages of Kingsclear, Long Creek, Hawkshaw, Pokiok, Temple, and Meductic, thence via a new location, commencing at Bull's Creek on route 2 south of Woodstock, to rejoin Route 2B near Jacksonville, thence via route 2B to a new location to by-pass the town of Hartland; thence by new location northward to cross No. 2 and the Saint John River at Florenceville, thence northward along Route No. 21 through the villages of Wicklow, Upper Wicklow, Clearview, River-de-Chute, Bairdsville to Andover; thence by new location to No. 2 north of Aroostook River; thence along No. 2 northward by-passing Grand Falls, St. Leonards, Green River, St. Basile; thence via a new location to by-pass the city of Edmundston and the village of St. Jacques; thence along Route 2 a distance of approximately 4.5 miles to the New Brunswick-Quebec border.

Quebec - Commencing where highway No. 2 intersects the boundary between Quebec and New Brunswick; thence northwesterly along the general location of highway No. 2 to the vicinity of Rivière du Loup; thence southwesterly along the general location of highway No. 2 passing in the vicinity of Ste-Anne-de-la-Pocatiere, Montmagny, to a point southeast of Lauzon; thence by a new diversion south of Levis to a crossing of the Chaudiere River near Charny; thence southwesterly along the general location of highway No. 9 passing in the vicinity of Drummondville to a point northeast of St-Hyacinthe; thence westerly by a new location to a crossing of the St. Lawrence River over Boucherville Islands and to a junction with Metropolitan Boulevard; thence southwesterly through Montreal Island to a crossing of Vaudreuil Bay over Ile aux Tourtres to a junction with a relocation of highway No. 17; thence along the general location of highway No. 17 to intersect the boundary between Quebec and Ontario.

Ontario - Commencing at the intersection of provincial highway No. 17 and the Ontario-Quebec boundary to one mile west of Green Creek, thence to Ottawa, Carleton Place, Perth, Peterborough; from there via highway No. 7 to Lindsay; from there via highway No. 12 to Orillia and Waubesaushene; then northerly on a new location to MacTier on Highway No. 69, Parry Sound, Britt, Burwash and Sudbury. West from Sudbury via highway No. 17 to Sault Ste. Marie; from there to Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden, and Kenora to the intersection of highway No. 17 with the Ontario-Manitoba boundary.

Manitoba - From the Ontario boundary to north of East Brain-

tree, McMunn and south of Hadashville to six miles west of Richer; thence north of the Canadian National Railway to the vicinity of St. Boniface; then west across the Seine and Red Rivers and provincial trunk highway No. 75 to the intersection of highways No. 2 and No. 3 near Oak Bluff; thence northerly across the Assiniboine River to the junction with highway No. 1 west in the vicinity of St. Charles; thence west via Headingley, across the Assiniboine River to the Canadian National Railway line; then paralleling that line to its junction with highway No. 1 West, and westerly through Portage la Prairie and adjacent to Burnside, Bagot, McGregor and Austin to a point two miles west of Austin and southwesterly to Sidney; thence westerly via a new location to one mile west of Kemnay, a point northeast of Alexander, and southwesterly along the Canadian Pacific Railway line to three miles west of Oak Lake; thence northwesterly and paralleling the railway to the Saskatchewan boundary.

Saskatchewan - Commencing at the Manitoba boundary west on provincial highway No. 1 through or near Fleming, Moosomin, Wapella, Whitewood, Percival, Broadview, Grenfell, Wolseley, Sintaluta, Indian Head, McLean, Balgonie, Regina, Belle Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, and to the Alberta boundary one mile east of Walsh.

Alberta - From the intersection of provincial highway No. 1 with the Saskatchewan boundary westerly through Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininvie, Tilley, Bantry, Brooks, thence northwesterly through or near Southesk to Bassano; thence west through Crowfoot, Cluny, Gleichen, Strathmore, Calgary, to a crossing of the Bow River, south of Shouldice bridge, and thence south of the Bow River to a crossing of the river two miles east of Canmore and to the intersection of provincial highway No. 1 with the Alberta-National Park boundary at the Banff Park East Gate.

Western National Parks - The Federal Government is wholly responsible for the construction and maintenance of the Trans-Canada Highway over the 117-mile route through Banff, Yoho, Glacier and Mount Revelstoke National Parks. This route leaving the east entrance of Banff National Park follows the Bow River Valley westerly and enters Yoho National Park, B.C. at the Great Divide. From this point the route follows the Kicking Horse River Valley to Field and reaches the west boundary of Yoho National Park near Leanchoil, B.C. Further west in Glacier National Park the route of

the highway parallels the Beaver River to approximately the east portal of the Canadian Pacific Railway Connaught Tunnel. From this point it traverses Rogers Pass and then follows the Illecillewaet River to the Park Boundary. In Mount Revelstoke National Park the route again parallels the course of the Illecillewaet River.

British Columbia - From the intersection of provincial highway No. 1 with the west boundary of Yoho National Park seventeen miles east of Golden; thence northwesterly following the Columbia River Basin to the Beaver River; thence to the east boundary of Glacier National Park, through the Park to Revelstoke Park either through the Park or south of the Park boundary to Revelstoke; thence west along highway No. 1 to Malakwa, Sicamous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Yale, Hope, thence to Mile 142 on highway No. 1 thence south of Chilliwack to the Veddar Canal; thence along the Sumas Prairie via Delair, bypassing Abbotsford on the south; thence westerly by a route to be determined to the Second Narrows Bridge, by a route to be determined to Horseshoe Bay. Again commencing at Departure Bay and southerly through Nanaimo via Ravine and Nicol Streets to Ladysmith, Duncan, to the North boundary of Victoria.

In all the foregoing, where the location of the route is not described in complete detail, the route shall follow the shortest practical distance between the places mentioned. The route may follow the shortest practical diversion around any place mentioned.

Appendix "B"

General Specifications of the Highway — Schedule "B"

1. Right-of-way

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. Pavement

(a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration - deceleration lanes are approved, and a minimum of twenty-two (22) feet.

(b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot-Mix with graded aggregate.

(c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.

(d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. Shoulders

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. Obstructions

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. Stone base course, sub-base, elevation of water table level

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. Curvature

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. Gradient

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. Sight Distances

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. Bridges

(a) Loading H20-S16.

(b) Overhead clearances, for full width between curbs, 14 feet 6 inches.

(c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.

(d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

(e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

Appendix "C"

Federal District Engineers Development Engineering Branch Engineering and Construction Division

NEWFOUNDLAND

A. L. Perley,
P.O. Box 4600, Bldg. 301,
Pleasantville,
St. John's, Nfld.
Phone: 578-4171

PRINCE EDWARD ISLAND

H. A. Nason
Box 1268, Dominion Bldg.,
Charlottetown, P.E.I.
Phone: 894-3814 - 6555

NOVA SCOTIA

H. A. Nason,
Box 2247, Room 717,
Ralston Bldg.,
Halifax, N.S.
Phone: 423-9221

NEW BRUNSWICK

H. A. Nason,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: 454-5575

QUEBEC

J. C. Beauchamp,
Champlain Harbour Station,
Wolfe's Cove,
Quebec 2, P.Q.,
Phone: 529-2981

ONTARIO

H. F. Peters,
241 Jarvis Street,
Toronto 2, Ont.
Phone: 362-6211 - 2525

MANITOBA

J. A. Flatt,
201 Federal Bldg.,
269 Main Street,
Winnipeg 1, Man.
Phone: Whitehall 3-0601

SASKATCHEWAN

J. A. Flatt,
325 Motherwell Bldg.,
Regina, Sask.
Phone: LA. 3-2331

ALBERTA

R. H. Smillie
10225 - 100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 429-2541

BRITISH COLUMBIA

B. G. Harvey,
Room 211,
816 Government St.,
Victoria, B.C.
Phone: EV. 2-5434

WESTERN NATIONAL PARKS

N. A. Huculak
Federal Bldg., Banff, Alta.
Phone: 762-3321 or 762-3322



DRIVING through Revelstoke National Park, B.C., on the Trans-Canada Highway, the motorist can meet the more traditional users of the park.

EN TRAVERSANT le parc national de Revelstoke sur la route transcanadienne le touriste peut souvent y trouver un des habitants traditionnels.



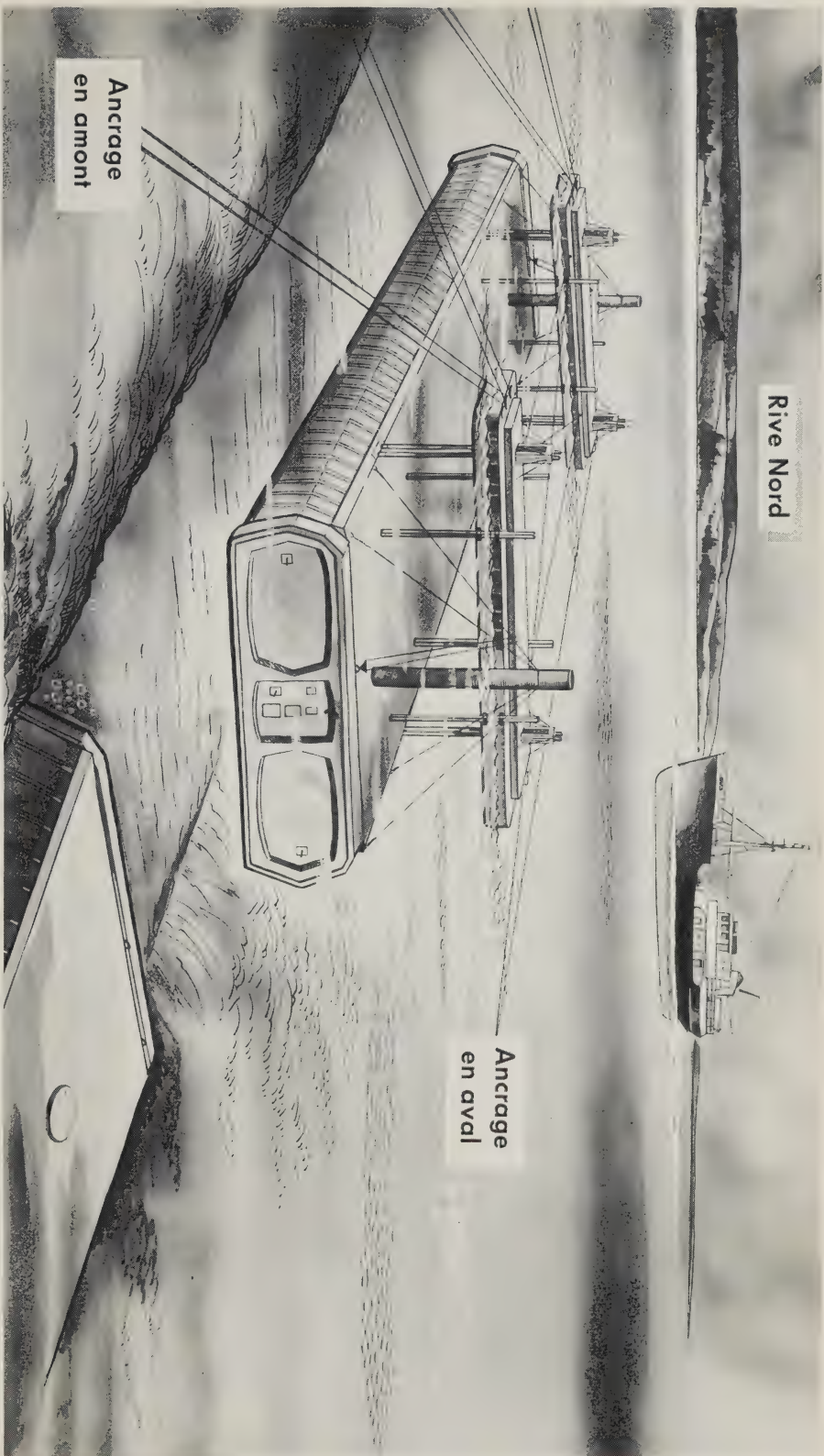
The Louis-Hippolyte Lafontaine bridge-tunnel will carry the Trans-Canada highway from Montreal Island to the south shore of the St. Lawrence. The entire crossing is 19,250 feet with the 6,451 feet of six-lane tunnel the longest pre-stressed structure of its kind in the world. The sections were built in drydock prior to being floated into the main stream and sunk to the river bottom. The crossing is

Rive Nord

Ancrage
en aval

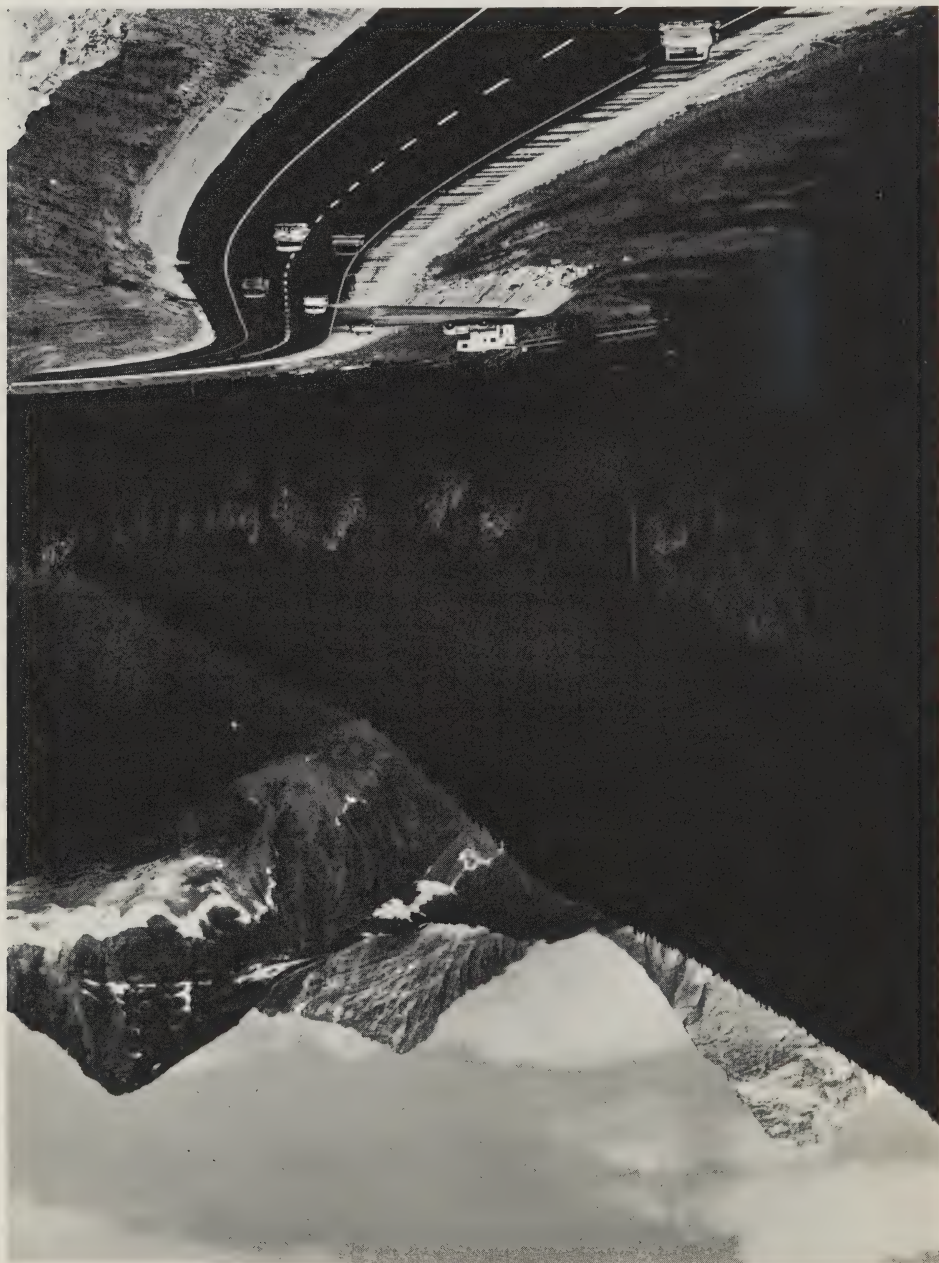
Ancrage
en amont

Le pont-tunnel Louis-Hippolyte Lafontaine fera passer la route transcanadienne de l'île de Montréal à la rive sud du Saint-Laurent. Le passage au complet mesurera 19,250 pieds et le tunnel à six voies, d'une longueur de 6,451 pieds, sera l'ouvrage précontraint le plus long du genre au monde. Les éléments ont été construits en cale sèche avant d'être transportés jusqu'au cours d'eau principal et coulés au fond du fleuve. On prévoit l'achèvement du pont-tunnel pour 1966.



A l'est de Revelstoke (C.-B.), se dirigeant vers le col Rogers, la route transcanadienne pénètre dans le parc national de Glacier au coeur des monts Selkirk. Avant la construction de la route transcanadienne, il n'y avait pas de chemin à travers le parc.

East of Revelstoke, B.C., going towards Rogers Pass, the Trans-Canada Highway enters Glacier National Park in the heart of the Selkirk Mountains. Until completion of the highway there was no road route through the park.



APPENDICE "C"

Ingénieurs de district fédéraux Direction du génie (aménagement) Division du génie et de la construction

TERRE-NEUVE	A. L. Perley Case postale 4600, édifice 301 Pleasantville Saint-Jean (T.-N.) Téléphone: 578-4171	ILE-DU-PRINCE-EDOUARD	H. A. Nason Case 1268, édifice Dominion Charlottetown (I. P.-É.) Téléphone: 894-3814 - 6555	NOUVELLE-ECOSSE	H. A. Nason Case 2247, pièce 717 Edifice Ralston Halifax (N.-É.) Téléphone: 423-9221	NOUVEAU-BRUNSWICK	H. A. Nason Case 1296, édifice fédéral Fredericton (N.-B.) Téléphone: 454-5575	QUEBEC	J. C. Beauchamp Gare maritime Champlain Anse-au-Foulon Québec 2 (P.Q.) Téléphone: 529-2981	COLOMBIE-BRITANNIQUE	B. G. Harvey Pièce 211 816, rue Gouvernement Victoria (C.-B.) Téléphone: EV. 2-5434
ONTARIO	H. F. Peters 241, rue Jarvis Toronto 2 (Ont.) Téléphone: 362-6211 - 2525	MANITOBA	J. A. Platt 201, édifice fédéral 269, rue Main Winnipeg 1 (Man.) Téléphone: WHitehall 3-0601	SASKATCHEWAN	J. A. Platt 325, édifice Motherwell Regina (Sask.) Téléphone: LA. 3-2331	ALBERTA	R. H. Smillie 10225/100 ^e Avenue Case 488 Edmonton (Alb.) Téléphone: 429-2541				

PARCS NATIONAUX DE L'OUEST
N. A. Huculak
Edifice fédéral
Banff (Alb.)
Téléphone: 762-3321 ou 762-3322

saut où le terrain ne le permet pas avec une économie raisonnable. Aux endroits où la chose est possible, on estime qu'il est opportun de réduire le bombement maximum à trois (3) degrés.

7. Pente

La pente de la route sera d'au plus 6 p. 100, sauf dans les cas où la chose est économiquement impossible, alors que 7 ou 8 p. 100 seront acceptables sur des courtes distances.

8. Distances à vue

Aux endroits où le terrain le permet, la distance à vue horizontale maximum et la distance à vue verticale minimum seront de six cents (600) pieds. En d'autres termes, le conducteur d'une voiture pourra voir un objet de six pouces de hauteur placé sur le pavé à 600 pieds en avant de lui, lorsque ses yeux se trouvent à quatre (4) pieds et six (6) pouces au-dessus du pavé.

9. Ponts

a) Charge H20-S16.

b) Dégagements supérieurs, sur la pleine largeur entre les bordures, 14 pieds et 6 pouces.

c) Pour les ponts de 30 pieds ou moins de longueur, la chaussée entre les bordures aura la largeur réunie du pavé et des accotements.

d) Pour les ponts de plus de 30 pieds et jusqu'à 100 pieds de longueur, la chaussée minimum entre les bordures aura 27 pieds et la largeur minimum des bordures de chaque côté sera de 18 pouces, ou le tablier offrira un dégagement équivalent.

e) Pour les ponts de plus de 100 pieds de longueur, la largeur minimum entre les bordures sera de 24 pieds et la largeur minimum des bordures de chaque côté sera de 18 pouces, ou le tablier offrira un dégagement équivalent.

APPENDICE "B" Devis général de la route — Liste "B"

1. Emprise

La largeur minimum de l'emprise sera de cent (100) pieds. Lorsque la route traverse des régions peuplées entraînant ainsi de fortes dépenses, une largeur minimum initiale de soixante-six (66) pieds sera acceptable.

2. Pavé

a) La largeur du pavé sera d'au plus vingt-quatre (24) pieds, sauf lorsque des ouvrages particuliers tels que voies d'accélération et de ralentissement sont approuvés, et d'au moins vingt-deux (22) pieds.

b) Le pavé sera d'un type bitumineux-minéral généralement appelé mélange bitumineux malaxé à chaud à l'usine et contenant des éléments très.

c) Une fois rendu compact, le pavé bitumineux-minéral n'aura pas moins de trois (3) pouces d'épaisseur.

d) Aux endroits où il est opportun de confectionner un pavé en béton, l'épaisseur et le type utilisés habituellement par les provinces seront acceptables.

3. Accotements

La largeur des accotements de chaque côté du pavé sera de dix (10) pieds, lorsqu'il est économiquement possible de les confectionner à cette largeur. Des largeurs plus faibles seront acceptables jusqu'à un minimum de cinq (5) pieds lorsque le terrain et (ou) l'économie rendent la chose nécessaire.

4. Obstacles

La distance minimum entre le bord du pavé et tout obstacle sur les accotements sera d'un (1) pied de moins que la largeur des accotements.

5. Infrastructure en pierre, assise et élévation du niveau de la nappe aquifère

La confection de l'infrastructure en pierre, de l'assise et du système de drainage régularisant l'élévation du niveau de la nappe aquifère sera effectuée de façon que le tout produise une chaussée ayant une capacité portante de charge d'essieu périodique de 18,000 livres.

6. Bombement

Le bombement de l'axe du pavé ne dépassera pas six (6) degrés,

jusqu'au point de croisement de la route provinciale n° 1 et de la frontière entre l'Alberta et le parc national, à l'entrée est du parc de Banff.

Parcs nationaux de l'ouest - Le gouvernement fédéral assume l'entière responsabilité de la construction et de l'entretien de la route transcanadienne sur le parcours de 117 milles dans les parcs nationaux de Banff, Yoho, Glacier et du mont Revelstoke. Ce parcours commence à l'entrée est du parc national de Banff, longe la vallée de la rivière Bow dans une direction ouest et pénètre dans le parc national d'Yoho (C.-B.) jusqu'à la ligne divisoire appelée "Great Divide". À partir de ce point, la route suit la vallée de la rivière Kicking Horse jusqu'à Field et atteint la limite ouest du parc national d'Yoho près des Leachhol (C.-B.). Plus à l'ouest dans le parc national de Glacier, le parcours de la route est parallèle à la rivière Beaver jusqu'aux environs de l'entrée est du tunnel Connaught du chemin de fer Pacifique-Canadien. De ce point, la route traverse le col Rogers et longe ensuite la rivière Illecillewaet jusqu'à la limite du parc. Dans le parc national du mont Revelstoke, la route côtoie de nouveau la rivière Illecillewaet.

Colombie-Britannique - À partir du point de croisement de la route provinciale n° 1 et de la limite ouest du parc national d'Yoho, à dix-sept milles à l'est de Golden; de là, dans une direction nord-ouest en longeant le bassin du fleuve Columbia jusqu'à la rivière Beaver; de là, jusqu'à la limite est du parc national de Glacier en traversant le parc jusqu'au parc de Revelstoke, soit à travers le parc ou au sud de la limite du parc jusqu'à Revelstoke; de là, dans une direction ouest en passant sur la route n° 1 jusqu'à Malakwa, Sicomous, Salmon Arm, Kamloops, Cache Creek, Spences Bridge, Lytton, Boston Bar, Vale, Hope, puis jusqu'au Mille 142 sur la route n° 1; de là, au sud de Chilliwack jusqu'au canal de Veddar; de là, en bordure de la prairie de Sumas via Telair en contournant Abbotsford au sud; de là, dans une direction ouest sur un parcours à établir jusqu'au pont sur le détroit Second et sur un autre parcours à établir également jusqu'à Horseshoe Bay. Commenant de nouveau à Departure Bay et dans une direction sud en passant par Nanaimo via les rues Ravine et Nicol jusqu'à Ladysmith, Duncan, puis jusqu'à la limite nord de Victoria.

Aux endroits où l'emplacement de la route n'est pas décrit en détail dans le parcours susmentionné, la route suivra la plus courte distance pratique entre les endroits indiqués. La route peut suivre le plus court détour pratique autour de tout endroit cité.

De là, dans une direction ouest en suivant la route n° 17 jusqu'au Sault-Ste-Marie, de là, jusqu'à Agawa, Michipicoten, White River, Marathon, Schreiber, Nipigon, Port Arthur, Ignace, Dryden et Kenora jusqu'au point de croisement de la route n° 17 et de la frontière Ontario-Manitoba.

Manitoba - À partir de la frontière ontarienne jusqu'au nord d'East Brantree, McMunn et au sud d'Hadashville jusqu'à six milles à l'ouest de Richer; de là, au nord du chemin de fer National-Canadien jusqu'aux environs de Saint-Boniface; de là, dans une direction ouest en traversant les rivières Seine et Rouge et la grande route provinciale n° 75 jusqu'au point de croisement des routes n° 2 et 3 près d'Oak Bluff; de là, dans une direction nord en traversant la rivière Assiniboine jusqu'à la jonction avec la route n° 1, dans une direction ouest jusqu'à la jonction avec la route n° 1 ouest, puis dans une direction ouest en passant par Portage-la-Prairie et près de Burnside, Bago, McGregor et Austin jusqu'à un point à deux milles à l'ouest d'Austin, puis dans une direction sud-ouest jusqu'à Sidney; de là, dans une direction ouest en suivant un nouveau parcours jusqu'à un mille à l'ouest de Kemnay, au Nord-est d'Alexander, et dans une direction sud-ouest le long de la voie ferrée du Pacifique-Canadien jusqu'à trois milles à l'ouest d'Oak Lake; de là, dans une direction nord-ouest et parallèlement à la voie ferrée jusqu'à la frontière de la Saskatchewan.

Saskatchewan - À partir de la frontière du Manitoba à l'ouest de la route provinciale n° 1, en passant par ou près de Fleming, Moosomin, Wapella, Whitehead, Percival, Broadview, Grenfell, Wolseley, Sintaluta, Indian Head, McLean, Balgonie, Regina, Belle-Plaine, Moose Jaw, Boharm, Caron, Mortlach, Parkbeg, Secretan, Chaplin, Morse, Herbert, Waldeck, Swift Current, Beverley, Webb, Antelope, Gull Lake, Carmichael, Tompkins, Piapot, et jusqu'à la frontière de l'Alberta, à un mille à l'est de Walsh.

Alberta - À partir du point de croisement de la route provinciale n° 1 et de la frontière de la Saskatchewan dans une direction ouest en passant par Walsh, Larmour, Irvine, Dunmore, Medicine Hat, Redcliff, Suffield, Alderson, Kininville, Tilley, Bantry, Brooks, puis dans une direction nord-ouest en passant par ou près de Southesk jusqu'à Bassano; de là, dans une direction ouest via Crowfoot, Cluny, Gleichen, Strathmore, Calgary jusqu'à une traversée de la rivière Bow au sud du pont de Shouldice, puis au sud de la rivière Bow jusqu'à une traversée de la rivière à deux milles à l'est de Canmore et

Island, Youngs Cove, Jemseg, Sheffeld et Manguerville jusqu'à une traversée de la rivière Saint-Jean près de Lower St. Marys; de là, en contournant Fredericton jusqu'à la route provinciale n° 2 à environ deux milles à l'ouest de Fredericton; de là, en passant par les villages de Kingsclear, Long Creek, Hawksshaw, Pokiok, Temple et Meductic puis, en passant sur un nouveau tronçon commençant à Bull's Creek sur la route n° 2 au sud de Woodstock, rejoignant la route n° 2B près de Jacksonville, de là, en passant sur la route 2B jusqu'à un nouveau tronçon contournant la ville de Hartland; de là, en passant sur un nouveau tronçon en direction nord afin de traverser la route n° 2 et la rivière Saint-Jean, à Florenceville, puis vers le nord le long de la route n° 21 en passant par les villages de Wicklow, Upper Wicklow, Clearview, Rivière-des-Chutes, Bairdsville jusqu'à Andover; de là, en passant sur un nouveau tronçon jusqu'à la route n° 2 au nord de la rivière Aroostook; de là, le long de la route n° 2 en direction nord, contournant Grand Falls, et passant par Saint-Léonard, Green River et Saint-Basile, puis via un nouveau tronçon contournant la cité d'Edmundston et le village de Saint-Jacques, le long de la route n° 2 sur une distance d'environ 4 milles et demi jusqu'à la frontière entre Québec et le Nouveau-Brunswick.

Québec - À partir de l'endroit où la route n° 2 croise la limite entre Québec et le Nouveau-Brunswick; de là, dans une direction nord-ouest en suivant à peu près la route n° 2 jusqu'aux environs de Rivière-du-Loup; de là, dans une direction sud-ouest en suivant à peu près la route n° 2 et en passant près de Sainte-Anne-de-la-Pocatière et de Montmagny jusqu'à un point au sud-est de Lauzon; de là, en contournant Lévis au sud jusqu'à une traversée de la rivière Chaudière près de Charney; de là, dans une direction sud-ouest en suivant à peu près la route n° 9 et en passant près de Drummondville jusqu'à un point au nord-est de Saint-Hyacinthe; de là, dans une direction ouest en suivant un nouveau tracé jusqu'à une traversée du fleuve Saint-Laurent aux îles de Boucherville et jusqu'à une jonction avec le boulevard Métropolitain, de là, dans une direction sud-ouest en traversant l'île de Montréal jusqu'à une traversée de la baie de Vaudreuil à l'île aux Tourtres et jusqu'à une jonction avec le nouveau parcours de la route n° 17; de là, en suivant à peu près la route n° 17 jusqu'à la limite entre le Québec et l'Ontario.

Ontario - À partir du point de croisement de la route provinciale N° 17 et de la frontière Ontario-Québec jusqu'à un mille à l'ouest de Green Creek, puis jusqu'à Ottawa, Carleton Place, Perth, Peterborough; de là, par la voie de la route n° 7 jusqu'à Lindsay; de là, en passant sur la route n° 12 jusqu'à Orillia et Waukegan; de là, dans une direction nord en suivant un nouveau parcours jusqu'à MacTier sur la route n° 69, Parry Sound, Britt, Burwash et Sudbury.

APPENDICE "A" Parcours de la route — Liste "A"

La route mentionnée à la liste "A" de chaque convention provinciale peut être décrite comme il suit :

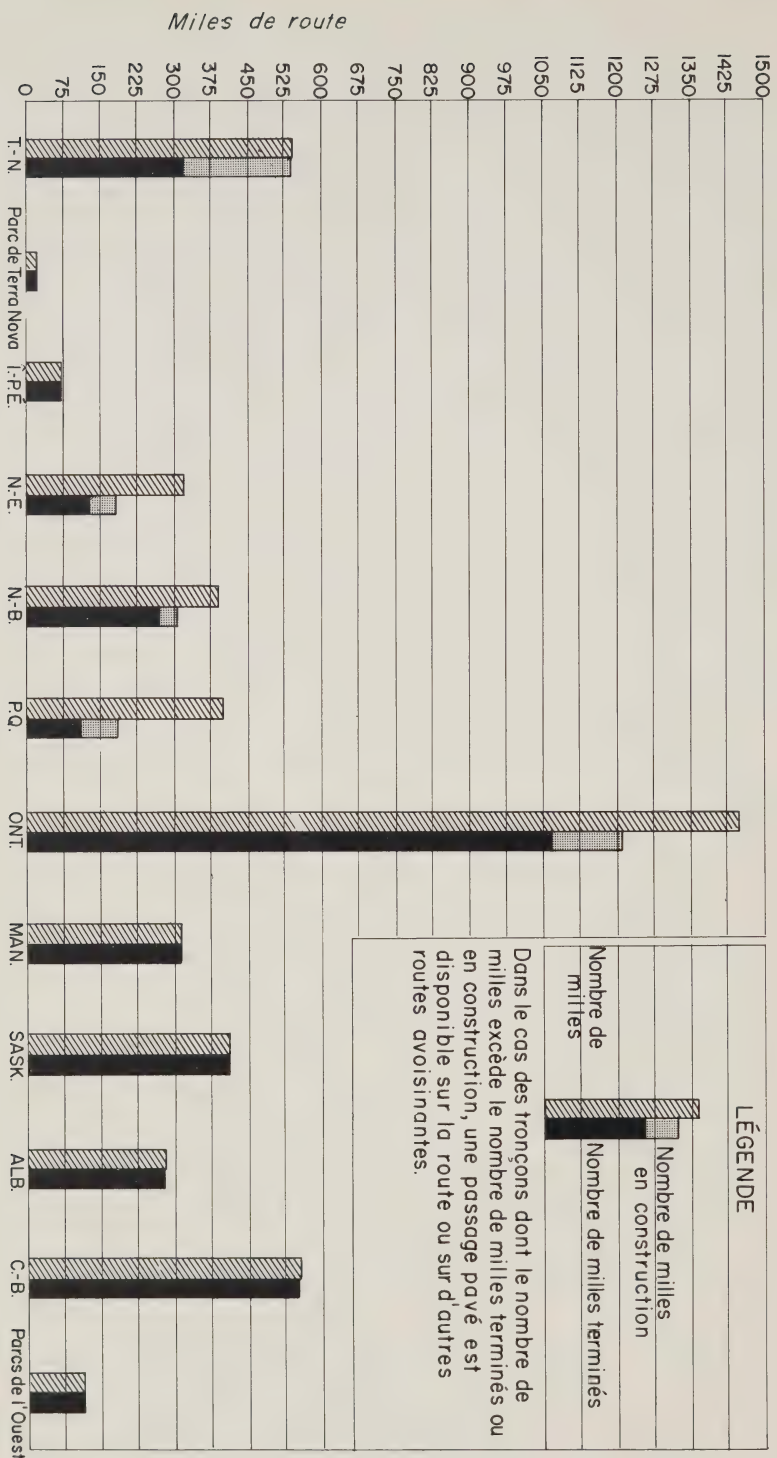
Terre-Neuve - À partir de la ville de Saint-Jean via Holyrood, Brigus Junction, Whitbourne, Chappel Arm, Goobies, Clarenville, Port Blanford, Charlottetown, Glovertown, Gambo, Gander, Glenwood, Notre-Dame Junction, Norris Arm, Bishop's Falls, Grand Falls, Badger, Hall's Bay, extrémité nord du lac Sandy, Deer Lake, Corner Brook, côté est du lac George, Southwest Brook, St. George's, Codroy Pond, South Branch, Tompkins jusqu'à Port-aux-Basques.

Ile-du-Prince-Edouard - À partir du passage d'eau des îles Wood, qui est le terminus du passage d'eau entre l'île du Prince-Edouard et la Nouvelle-Écosse, puis de là, en passant par Millville jusqu'à la limite est de la ville de Charlottetown; ensuite, à partir de la limite nord de la ville de Charlottetown en passant par Cornwall, Bonshaw, Tyron, jusqu'à la ville de Borden qui est le terminus, sur l'île du Prince-Edouard, du passage d'eau entre l'île et Cape Tormentine (N.-B.).

Nouvelle-Écosse - À partir de la frontière qui sépare le Nouveau-Brunswick de la Nouvelle-Écosse jusqu'à Oxford, de là, en passant sur la route 4 jusqu'au détroit de Canso et traversant le détroit sur la chaussee qui conduit à Port Hastings; de là, via Whyecocomagh, Baddeck et Little Bras-d'Or jusqu'au terminus du passage d'eau de Terre-Neuve à North Sydney. La route comprendra aussi le tronçon de route depuis la route n° 4 jusqu'à Pictou, et de là jusqu'au terminus de passage d'eau de l'Île-du-Prince-Edouard en direction de Caribou.

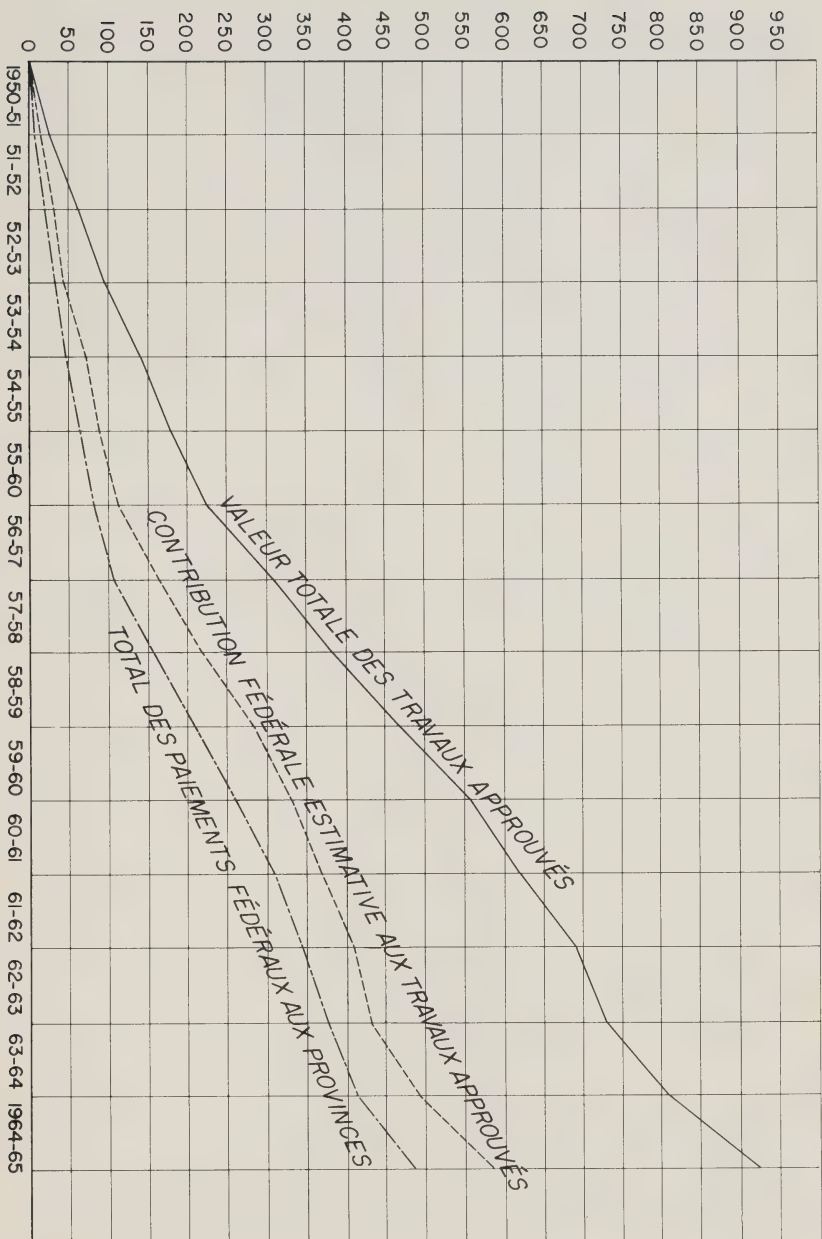
Nouveau-Brunswick - À partir du point de croisement de la route provinciale n° 2 et de la frontière entre la Nouvelle-Écosse et le Nouveau-Brunswick, en se dirigeant vers l'ouest jusqu'au village d'Aulac, puis dans une direction est en passant par la route provinciale n° 16, par le village de Pointe-de-Bute, Baie-Verte, Port Elgin, Melrose, et Bayfield jusqu'au village de Cape Tormentine; également, à partir du village d'Aulac en passant sur la route provinciale n° 2 via la ville de Sackville; de là, en suivant un nouveau tronçon jusqu'à Memramcook puis, en passant sur un nouveau tronçon qui contournera Moncton au nord, et reprenant la route provinciale n° 2 près de River Glade, via Anagance, Penobsquis, puis évitant la ville de Sussex jusqu'à la jonction des routes n° 2 et 9; de là, le long de la route provinciale n° 9 via les villages de Coles

NOMBRE DE MILES CONSTRUITS EN VERTU DE LA LOI ET DES CONVENTIONS SUR LA ROUTE TRANSCANADIENNE



ENGAGEMENTS ET PAIEMENTS CONTRACTUELS

Millions de dollars



Année financière

tableau no 6 Résumé des paiements faits aux gouvernements provinciaux

Province	Construction préalable	Construction provisoire	Nouvelle construction	Totaux
Terre-Neuve	—	—	\$22,765,152.13	\$22,765,152.13
Ile-du-Prince-Édouard	—	—	1,107,933.59	1,107,933.59
Nouvelle-Écosse	—	—	4,714,202.48	4,714,202.48
Nouveau-Brunswick	—	—	8,046,357.70	8,046,357.70
Québec	—	—	32,048,993.68	32,048,993.68
Ontario	—	—	3,689,809.40	3,689,809.40
Manitoba	—	—	208,580.99	208,580.99
Saskatchewan	—	—	38,624.08	38,624.08
Alberta	—	—	95,768.23	95,768.23
Colombie-Britannique	—	—	3,369,689.36	3,369,689.36
Totaux	—	—	\$76,085,111.64	\$76,085,111.64

Du 1^{er} avril 1964
au 31 mars 1965

Province	Construction préalable	Construction provisoire	Nouvelle construction	Totaux
Terre-Neuve	—	\$ 156,445.23	\$ 63,586,504.82	\$ 63,742,950.05
Ile-du-Prince-Édouard	\$ 288,383.09	—	7,720,797.83	8,009,180.92
Nouvelle-Écosse	88,501.37	—	22,052,828.81	22,141,330.18
Nouveau-Brunswick	1,447,800.14	193,576.71	49,012,449.58	50,653,826.43
Québec	—	—	52,380,133.04	52,380,133.04
Ontario	3,565,543.48	299,790.79	115,405,866.53	119,271,200.80
Manitoba	887,446.75	17,958.54	17,692,326.94	18,597,732.23
Saskatchewan	270,753.29	3,103.38	15,172,571.83	15,446,428.50
Alberta	475,943.78	14,975.87	21,342,206.34	21,833,125.99
Colombie-Britannique	3,190,102.08	692,171.05	113,868,155.39	117,750,428.52
Totaux	\$10,214,473.98	\$1,378,021.57	\$478,233,841.11	\$489,826,336.66

Du 10 décembre 1949
au 31 mars 1965

Tableau no 5
 Résumé des engagements contractuels

Du 1^{er} avril 1964 au 31 mars 1965

Province	Montant total des engagements approuvés	Part du Canada
Terre-Neuve	\$ 21,848,226.51	\$19,673,302.99
Ile-du-Prince-Edouard	1,551,638.29	1,396,374.46
Nouvelle-Ecosse	9,092,858.78	8,056,768.04
Nouveau-Brunswick	12,558,712.65	11,270,048.65
Québec	59,214,333.31	47,130,385.54
Ontario	6,682,773.09	3,330,983.56
Manitoba	911,823.85	475,241.46
Saskatchewan	29,634.27	14,817.35
Alberta	545,900.00	284,350.00
Colombie-Britannique	5,074,388.00	2,536,694.00
Totaux	\$117,510,288.75	\$94,168,966.05

Du 12 décembre 1949 au 31 mars 1965

Province	Montant total des engagements approuvés	Part du Canada
Terre-Neuve	\$117,906,703.95	\$ 90,713,603.57
Ile-du-Prince-Edouard	12,227,966.45	8,710,095.65
Nouvelle-Ecosse	36,485,803.54	27,080,649.45
Nouveau-Brunswick	79,292,773.12	54,946,496.31
Québec	128,733,657.05	92,536,607.65
Ontario	230,158,554.42	129,144,578.53
Manitoba	36,071,596.99	21,207,879.57
Saskatchewan	28,296,584.59	16,192,637.52
Alberta	38,067,957.57	22,801,980.16
Colombie-Britannique	216,576,763.30	123,599,096.93
Totaux	\$923,818,360.98	\$586,933,625.34

tableau no 4 Rapport sur le travail

Jours-homme (8 heures) de travail à pied d'oeuvre sur la route transcanadienne

Du 1^{er} avril 1964 au 31 mars 1965

Province	Travail de génie sur place	Surveillance de la construction	Travaux de construction	Totaux
Terre-Neuve	44,476	56,887	392,867	494,230
Ile-du-Prince-Edouard	4,196	931	9,313	14,440
Nouvelle-Ecosse	16,560	5,808	58,520	80,888
Nouveau-Brunswick	21,673	8,768	90,792	121,233
Québec	123,419	208,571	385,745	717,735
Ontario	26,275	12,141	79,696	118,112
Manitoba	—	—	—	—
Saskatchewan	75	35	302	412
Alberta	—	—	—	—
Colombie-Britannique	8,218	4,126	27,683	40,027
Parc de Terra Nova	—	—	—	—
Parcs de Banff et d'Yoho	1,336	364	46	1,746
Parcs de Glaciers et de Revelstoke	3,900	724	3,849	8,473
Totaux	250,128	298,355	1,048,813	1,597,296

Remarque: Le nombre total de jours-homme (8 heures) de travail hors chantier est évalué à 2,715,403 pour la même période.

Du 10 décembre 1949 au 31 mars 1965

Province	Travail de génie sur place	Surveillance de la construction	Travaux de construction	Totaux
Terre-Neuve	142,419	200,120	1,246,735	1,589,274
Ile-du-Prince-Edouard	38,043	13,626	155,564	207,233
Nouvelle-Ecosse	116,502	57,919	453,588	628,009
Nouveau-Brunswick	162,494	74,721	783,587	1,020,802
Québec	136,837	229,052	426,998	792,887
Ontario	768,346	624,369	3,325,277	4,717,992
Manitoba	61,189	35,634	367,653	464,476
Saskatchewan	143,775	91,896	432,073	667,744
Alberta	79,212	40,815	326,630	446,657
Colombie-Britannique	353,432	335,628	1,833,448	2,522,508
Parc de Terra Nova	66,620	16,191	174,086	256,897
Parcs de Banff et d'Yoho	148,921	42,770	283,148	474,839
Parcs de Glaciers et de Revelstoke	139,581	29,012	264,600	433,193
Totaux	2,357,371	1,791,753	10,073,387	14,222,511

Remarque: Le nombre total de jours-homme (8 heures) de travail hors chantier est évalué à 24,178,269 pour la même période.

tableau no 3 Pavage

Du 1er avril 1964 au 31 mars 1965

Province			Province		
<i>Milles de pavage dont on a approuvé les contrats</i>			<i>Milles de pavage dont on a approuvé les contrats</i>		
<i>Nombre de milles terminés</i>			<i>Nombre de milles terminés</i>		
Terre-Neuve	220	66	Terre-Neuve	66	231
Ile-du-Prince-Edouard	—	—	Ile-du-Prince-Edouard	—	—
Nouvelle-Ecosse	—	—	Nouvelle-Ecosse	—	—
Nouveau-Brunswick	41	41	Nouveau-Brunswick	41	—
Québec	75	87	Québec	87	—
Ontario	11	23	Ontario	23	—
Manitoba	—	—	Manitoba	—	—
Saskatchewan	—	—	Saskatchewan	—	—
Alberta	—	—	Alberta	—	—
Colombie-Britannique	6	14	Colombie-Britannique	14	—
Parc de Terra Nova	—	—	Parc de Terra Nova	—	—
Parcs de Banff et d'Yoho	—	—	Parcs de Banff et d'Yoho	—	—
Parcs de Glacier et de Revelstoke	—	—	Parcs de Glacier et de Revelstoke	—	—
Totaux	353	231	Totaux	231	—

Du 10 décembre 1949 au 31 mars 1965

Province			Province		
<i>Milles de pavage dont on a approuvé les contrats</i>			<i>Milles de pavage dont on a approuvé les contrats</i>		
<i>Nombre de milles terminés</i>			<i>Nombre de milles terminés</i>		
Terre-Neuve	539	319	Terre-Neuve	319	3,645
Ile-du-Prince-Edouard	71	71	Ile-du-Prince-Edouard	71	—
Nouvelle-Ecosse	122	122	Nouvelle-Ecosse	122	—
Nouveau-Brunswick	270	270	Nouveau-Brunswick	270	—
Québec	146	109	Québec	109	—
Ontario	1,076	1,068	Ontario	1,068	—
Manitoba	309	309	Manitoba	309	—
Saskatchewan	406	406	Saskatchewan	406	—
Alberta	281	281	Alberta	281	—
Colombie-Britannique	550	550	Colombie-Britannique	550	—
Parc de Terra Nova	25	25	Parc de Terra Nova	25	—
Parcs de Banff et d'Yoho	80	80	Parcs de Banff et d'Yoho	80	—
Parcs de Glacier et de Revelstoke	35	35	Parcs de Glacier et de Revelstoke	35	—
Totaux	3,910	3,645	Totaux	3,645	—

tableau no 2 Nivellement

Du 1^{er} avril 1964 au 31 mars 1965

Province	<i>Milles de nivellement dont on a approuvé les contrats</i>	<i>Nombre de milles ter- minés</i>
Terre-Neuve	15	142
Ile-du-Prince-Édouard	—	—
Nouvelle-Écosse	46	27
Nouveau-Brunswick	32	29
Québec	16	35
Ontario	48	45
Manitoba	—	—
Saskatchewan	—	—
Alberta	—	—
Colombie-Britannique	—	—
Parc de Terra Nova	—	—
Parcs de Banff et d'Yoho	—	—
Parcs de Glacier et de Revelstoke	—	—
Totaux	157	278

Du 10 décembre 1949 au 31 mars 1965

Province	<i>Milles de nivellement dont on a approuvé les contrats</i>	<i>Nombre de milles ter- minés</i>
Terre-Neuve	539	507
Ile-du-Prince-Édouard	71	71
Nouvelle-Écosse	185	160
Nouveau-Brunswick	305	298
Québec	183	161
Ontario	1,206	1,173
Manitoba	250	250
Saskatchewan	406	406
Alberta	281	281
Colombie-Britannique	550	550
Parc de Terra Nova	25	25
Parcs de Banff et d'Yoho	80	80
Parcs de Glacier et de Revelstoke	35	35
Totaux	4,116	3,997

STATISTIQUE DE LA ROUTE

Les tableaux et les graphiques qui suivent contiennent des données statistiques sur l'état d'avancement de la route depuis le 10 décembre 1949 jusqu'au 31 mars 1965 et comprennent des renseignements qui touchent particulièrement à l'année financière dont le présent rapport fait l'objet.

tableau no 1

Nombre total de milles
de route désignée
et de milles pavés

Province	Nombre de milles	Nombre de milles pavés ¹
Terre-Neuve	540	319
Ile-du-Prince-Édouard	71	71
Nouvelle-Écosse	318	228
Nouveau-Brunswick	390	340
Québec	399	330
Ontario	1,453	1,403
Manitoba	309	309
Saskatchewan	406	406
Alberta	282	282
Colombie-Britannique	552	550
Parcs nationaux	140	140
Totaux	4,860	4,378

¹Y compris le nombre de milles de route désignée, pavés avant le 10 décembre 1949.
La différence entre le "Nombre de milles pavés" et le "Nombre de milles" indique le nombre de milles en construction. Il est possible de rouler d'un bout à l'autre, soit sur les tronçons en construction, soit sur d'autres routes avoisinantes.

terminés. Le nombre de milles pour lequel on avait approuvé le pavage atteint 3,910, dont 3,645 sont finis. Des 779 ouvrages d'art dont on a approuvé la construction, 699 sont achevés. Les rapports provinciaux indiquent que la construction de la route a demandé 1,597,296 jours-homme (8 heures) de travail au cours de l'année financière. On évalue à 2,715,403 jours-homme supplémentaires le travail hors chantier représenté par la fourniture de matériaux et de services. Le total estimatif de jours-homme de travail à pied d'œuvre qu'a comporté la construction de la route à ce jour est évalué à 14,222,511.

ROUTE TRANSCANADIENNE TRAVERSANT LES PARCS NATIONAUX

C'est à la Direction du génie (aménagement) du ministère des Travaux publics que l'on doit la construction d'environ 140 milles de route dans les limites de cinq parcs nationaux. La plupart des travaux sont maintenant terminés, sauf le pavage définitif qui sera fait plus tard ainsi que de petites modifications pour améliorer l'écoulement des eaux. On est en train d'étudier la région des avalanches dans le parc de Glacier afin de déterminer l'efficacité des ouvrages de protection existants. Voici le détail des travaux entrepris au cours de la période de construction de 1964:

Parc national d'Yoho

Les travaux ont consisté à corriger légèrement l'affaissement des approches du pont sur la rivière Oterrtail.

Parc national de Glacier

En juillet 1964, on a terminé la construction des deux pare-neige qui avaient été commencés en 1963 pour le tronçon de Tupper Timber et extension jusqu'à Len. Au cours de l'année, on a aussi construit des ouvrages spéciaux de protection contre les avalanches aux Milles 4.6 et 4.7. Un contrat a été adjugé pour le revêtement en pierre du pare-neige Pioneer 1.

Parc national de Revelstoke

Les travaux n'ont comporté que de l'ensemencement et la stabilisation des talus.

autorisant un apport contributoire supplémentaire de 40 p. 100 à l'égard d'un dixième du nombre de milles de la route dans chaque province. On a prolongé la période de construction jusqu'au 31 décembre 1960 et porté à \$250 millions le montant global que le Canada pouvait dépenser à cet égard.

Aux termes de la loi modifiée, de nouveaux accords ont été conclus avec chacune des provinces participantes. Ces accords stipulaient que la route devrait être terminée pour le 31 décembre 1960 en conformité du devis général de la liste "B", ou qu'elle devrait répondre aux normes d'une bonne route pavée. Cette stipulation écartait la nécessité pour une province de reconstruire des tronçons de route qui étaient déjà pavés selon des normes provinciales satisfaisantes et permettait d'accélérer le travail aux tronçons où la reconstruction et le pavage étaient plus impérieux.

De nouvelles lois promulguées en 1959 et en 1960 ont prolongé la période de construction jusqu'au 31 décembre 1963 et ont porté la contribution du Canada à un maximum de \$400 millions.

La Province de Québec a conclu un accord sur la route transcanadienne le 27 octobre 1960.

En 1963, le Parlement a permis de prolonger la période de construction jusqu'au 31 décembre 1967 et d'accroître la contribution du Canada à un maximum de \$625 millions. Cette loi stipule aussi que le Gouvernement fédéral paierait 90 p. 100 du coût de construction de la route dans les provinces Maritimes, à partir du 1er avril 1963.

Les appendices "A" et "B" du présent rapport contiennent des aperçus des listes "A" et "B" des accords avec les provinces. La liste "A" donne le parcours de la route dans chaque province et la liste "B" renferme le devis général.

ETAT D'AVANCEMENT DE LA CONSTRUCTION

Au cours de l'année financière, on a établi des records : la valeur des nouveaux projets qui ont été approuvés pour la route transcanadienne s'est chiffrée par plus de 117 millions, alors que le montant total des contributions fédérales aux travaux exécutés s'est établie à 76 millions.

La contribution estimative du Canada aux travaux approuvés a augmenté de 94 millions et sa part totale excède maintenant les 500 millions.

Le nombre de milles de la route pour lequel on avait approuvé le nivellement au 31 mars 1965 s'élève à 4,116, dont 3,997 sont

**RAPPORT Sur les Travaux exécutés en conformité
de la Loi sur la route transcanadienne**

POUR L'ANNÉE FINANCIÈRE TERMINÉE LE 31 MARS 1965

LA LOI SUR LA ROUTE TRANSCANADIENNE

Les accords initiaux sur la construction de la route prévus à la Loi de 1949 sur la route transcanadienne (2e session), chapitre 40, article 1, ont été conclus avec les provinces de l'Ontario, du Manitoba, de la Colombie-Britannique, de l'Île-du-Prince-Édouard, de la Saskatchewan et de l'Alberta le 24 avril 1950, avec la province du Nouveau-Brunswick le 27 mai 1950, avec la province de Terre-Neuve le 23 juin 1950 et avec la province de la Nouvelle-Écosse le 15 mai 1952.

Selon les termes des accords initiaux, et aussi de la Loi, une route pavée dont le tracé s'étendrait de la côte est à la côte ouest du Canada devait être construite et terminée pour le 9 décembre 1956. Les accords stipulaient en outre que le Canada acquitterait 50 p. 100 du coût de toute nouvelle construction et jusqu'à concurrence de 50 p. 100 du coût des tronçons de routes construits antérieurement pourvu que ces tronçons fissent bien partie de la route transcanadienne. Le montant global de la contribution du Canada était limité, aux termes de la Loi, à \$150,000,000.

La loi stipulait également que le ministre pouvait payer à même les fonds affectés par le Parlement les frais de construction des routes traversant les parcs et faisant partie d'une route transcanadienne.

Aux premiers stades du projet, les provinces en général ont eu à faire face à maints problèmes relatifs à l'extension du programme de construction. Les travaux ont démarré lentement en 1950 et, bien que la construction se soit ensuite poursuivie à un rythme accéléré, la plupart des provinces ont éprouvé des difficultés à affecter, dans le cadre de leur budget annuel, les sommes nécessaires aux travaux qui auraient permis d'achever la route dans le délai de sept ans stipulé à la Loi de 1949. Lors d'une conférence fédérale-provinciale sur les routes, tenue en novembre 1955, on a débattu la question du nombre de milles non terminés. Les décisions prises à cette conférence ont abouti à une modification de la Loi sur la route transcanadienne, apportée en 1956. Cette modification donnait plus d'ampleur à la contribution du Canada au coût de la construction en

table des matières

9	LOI SUR LA ROUTE TRANSCANADIENNE
10	ETAT D'AVANCEMENT DE LA CONSTRUCTION
11	ROUTE TRANSCANADIENNE TRAVERSANT LES PARCS NATIONAUX
12	STATISTIQUE DE LA ROUTE
	Tableau 1 - Nombre de milles, etc.
	Tableau 2 - Nivellement
	Tableau 3 - Pavage
	Tableau 4 - Rapport sur le travail
	Tableau 5 - Résumé des engagements contractuels
	Tableau 6 - Résumé des paiements faits aux gouvernements provinciaux
	Graphique 1 - Engagements et Paiements Contractuels
	Graphique 2 - Nombre de milles
21	APPENDICES
21	A - Liste A - Parcours de la route
25	B - Liste B - Devis général
27	C - Ingénieurs régionaux fédéraux

L'honorable

LUCIEN CARDIN,

Ministre des travaux publics,

Ottawa.

Monsieur,

J'ai l'honneur de vous soumettre le seizième
rapport annuel sur les travaux exécutés en
conformité de la Loi sur la route trans-
canadienne, chapitre 269, Statuts révisés du
Canada (1952), pour l'année financière
terminée le 31 mars 1965.

Votre obéissant serviteur,

LUCIEN LALONDE,

Sous-ministre.

A son Excellence
le major-général
GEORGES-P. VANIER, D.S.O., M.C., C.D.,
Gouverneur général et Commandant en chef du
Canada.
Excellence,

Le sousigné a l'honneur de présenter à Votre
Excellence le rapport annuel sur les travaux
exécutés en conformité de la Loi sur la route
transcanadienne, chapitre 269, Statuts révisés
du Canada (1952), pour l'année financière
terminée le 31 mars 1965.

Respectueusement soumis

LUCIEN CARDIN

Ministre des Travaux publics.

Nº de cat.: W41-1965

Imprimeur de la Reine et Contrôleur de la Papeterie
ROGER DUHAMEL, M.S.R.C.
Ottawa, 1966

©



rapport annuel

Ministère des Travaux publics
Direction du Génie
(aménagement)

Travaux exécutés en conformité de

la loi sur la route Transcanadienne

Année financière terminée le

31 MARS 1965

Publication autorisée
par l'Honorable

Lucien Cardin

Ministre des Travaux publics

Ottawa

Rapport annuel pour l'année
financière terminée le 31 mars
1965



PA1 PW 41
A55

Canada Public Works,
Department of

Report of road building under the
TRANS-CANADA HIGHWAY Act.

LIBRARY
APR 1967
UNIVERSITY OF TORONTO

Department of Public Works
CANADA

Annual Report
For The Fiscal Year
Ended March 31
1966



annual report

Department of public works
Development Engineering
Branch

proceedings
under the
trans-Canada highway
act

Fiscal year ended

March 31, 1966

Issued under the Authority of the
Honourable George J. McIlraith
Minister of Public Works
Ottawa

©
ROGER DUHAMEL, F.R.S.C.
Queen's Printer and Controller of Stationery
Ottawa, 1967

Cat. No.: W41-1966

To His Excellency Major-General
GEORGES P. VANIER, D.S.O., M.C., C.D.,
Governor-General and Commander-in-Chief
of Canada

May it please Your Excellency:

The undersigned has the honour to lay before
Your Excellency the Annual Report of
Proceedings under the Trans-Canada Highway
Act, Chapter 269, Revised Statutes of Canada,
(1952), for the fiscal year ended March 31st,
1966.

Respectfully submitted,
GEORGE J. McILRAITH
Minister of Public Works.

The Honourable GEORGE J. MCILRAITH
Minister of Public Works,
Ottawa

Sir:

I have the honour to submit the seventeenth
Annual Report of Proceedings Under the
Trans-Canada Highway Act, Chapter 269,
Revised Statutes of Canada, (1952), for the
fiscal year ended March 31st, 1966.

Your obedient servant,
LUCIEN LALONDE

Deputy Minister

contents

- 9 THE TRANS-CANADA HIGHWAY ACT
- 10 CONSTRUCTION PROGRESS
- 11 TRANS-CANADA HIGHWAY IN NATIONAL PARKS
- 12 HIGHWAY STATISTICS
 - Table 1 - Mileage, etc.
 - Table 2 - Grading construction
 - Table 3 - Paving construction
 - Table 4 - Summary of Contractual Commitments
 - Table 5 - Summary of Payments to Provincial Governments
 - Graph 1 - Contractual Commitments and Payments
 - Graph 2 - Mileage Constructed
- 19 APPENDICES
 - 19 A - General Specifications
 - 21 B - Federal District Engineers
 - 23 C - Maps of Route

Report of the proceedings under The Trans-Canada Highway Act

FOR THE FISCAL YEAR ENDED MARCH 31, 1966

THE TRANS-CANADA HIGHWAY ACT

The original agreements covering the construction of the Highway, as provided for in the Trans-Canada Highway Act 1949 (2nd Sess.), C.40, S.I. were executed with the Provinces of Ontario, Manitoba, British Columbia, Prince Edward Island, Saskatchewan and Alberta on April 24, 1950, with the Province of New Brunswick on May 27, 1950, the Province of Newfoundland on June 23, 1950 and with the Province of Nova Scotia on May 15, 1952.

These original agreements provided, as did the Act, for a paved highway across Canada by December 9, 1956. They also provided that Canada would contribute 50 per cent of the cost of new construction and up to 50 per cent of the cost of previously constructed sections of the highway where these sections were properly incorporated in the Trans-Canada Highway. Canada's total contribution under the Act was limited to \$150 million.

The Act also provided that the Minister might, out of monies appropriated by Parliament, provide for the construction of such highways within the National Parks as form part of a Trans-Canada Highway.

In the early stages of the project, the Provinces generally experienced many problems in connection with the enlarged construction program. The work began slowly in 1950 and, although construction continued to a high standard, most provinces found it difficult to provide, in their yearly programs, for the work necessary to ensure the completion of the Highway within the seven-year period covered by the Act of 1949. The uncompleted mileage was the subject of discussion at a Federal-Provincial Highway Conference in November 1955. The decisions reached during that Conference resulted in a 1956 Amendment of the Trans-Canada Highway Act. The enactment of this amendment increased the extent of Canada's contribution to the cost of the highway by providing for an additional 40 per cent contribution to the cost of construction on one-tenth of the highway mileage in each Province. The construction period was extended to the 31st day of December, 1960, and the aggregate limit of the funds, available for expenditure by Canada was increased to \$250 million.

New agreements under the amended Act were entered into with each of the participating provinces. These agreements provided that by the 31st day of December, 1960, the highway should be completed in conformity with the general specifications of Schedule "B", or that it should constitute a good standard of paved highway. This provision eliminated the necessity of a Province reconstructing sections of the highway which were already paved to a satisfactory provincial standard and made it possible to speed up the work on those sections where reconstruction and paving were most essential.

Legislation passed in 1959 and 1960 extended the construction period to December 31, 1963, and increased the amount of Canada's contribution to a maximum of \$400 million.

The Province of Quebec became party to a Trans-Canada Highway Agreement on October 27, 1960.

Legislative authority was provided in 1963 for an extension of the construction period to December 31, 1967, and allowed for federal contributions up to \$625 million. It also provided for payment by Canada of 90 per cent of construction costs incurred by the Atlantic provinces from April 1, 1963.

CONSTRUCTION PROGRESS

The fiscal year again set a record in the total federal contributions for one year at \$83,423,000. The approved federal share on new work rose \$50,377,000 and the total value of work done or in progress under the Trans-Canada Highway Agreements was just below \$1 billion.

The mileage of the Highway approved for grading to March 31, 1966, was 4,210 of which 4,149 miles were completed. The mileage approved for paving totalled 4,245 of which 4,139 miles were completed. Structures approved for construction totalled 841 of which 787 have been completed.

TRANS-CANADA HIGHWAY IN NATIONAL PARKS

The Development Engineering Branch of the Department of Public Works is directly responsible for construction of approximately 140 miles of highway within the boundaries of five National Parks. Most of the work now has been completed except for final pavement which is to be done at a later date and minor modifications to improve drainage. Details of the work program undertaken during the 1965 construction season follow:

Glacier National Park

A contract was completed for the stone facing of the Pioneer #1 Snowshed. Remedial work, foundation strengthening and improvements in drainage were carried out as well as seeding of avalanche defences by helicopter. Slide correction began at mile 1.2 under contract. Studies of snowsheds were made with a view to further avalanche defences.

HIGHWAY STATISTICS

The following tables and graphs furnish a statistical report of progress on the Highway from December 10, 1949, to March 31, 1966, and include information pertaining specifically to the fiscal year under review.

table no. 1

Total Mileage
of Designated Route
and Paved Mileage

Province	<i>Total Mileage</i>	<i>Paved Mileage (Note 1)</i>
Newfoundland	540	525
Prince Edward Island	71	71
Nova Scotia	318	274
New Brunswick	390	307
Quebec	399	325
Ontario	1,453	1,405
Manitoba	309	309
Saskatchewan	406	406
Alberta	282	282
British Columbia	552	550
National Parks	140	140
Totals	4,860	4,594

(1) Includes mileage on designated route prior to December 10, 1949. The difference between "Paved Mileage" and "Total Mileage" indicates the mileage under construction. Travel is possible throughout, either on sections under construction or on alternative routes in the vicinity.

table no. 2 grading construction

1 April 1965 to 31 March 1966

Province	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland	—	32
Prince Edward Island	—	—
Nova Scotia	31	41
New Brunswick	39	38
Quebec	6	13
Ontario	18	36
Manitoba	—	—8*
Saskatchewan	—	—
Alberta	—	—
British Columbia	—	—
Terra Nova Park	—	—
Banff and Yoho Parks	—	—
Glacier and Revelstoke Parks	—	—
Totals	94	152

10 December 1949 to 31 March 1966

Province	<i>Miles of Grading Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland	539	539
Prince Edward Island	71	71
Nova Scotia	216	201
New Brunswick	344	336
Quebec	189	174
Ontario	1,224	1,209
Manitoba	250	242
Saskatchewan	406	406
Alberta	281	281
British Columbia	550	550
Terra Nova Park	25	25
Banff and Yoho Parks	80	80
Glacier and Revelstoke Parks	35	35
Totals	4,210	4,149

*Route revised and shortened.

table no. 3 paving construction

1 April 1965 to 31 March 1966

Province	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland	—	206
Prince Edward Island	—	—
Nova Scotia	112	61
New Brunswick	37	37
Quebec	—7*	32
Ontario	64	20
Manitoba	—11*	—11*
Saskatchewan	—	—
Alberta	—	—
British Columbia	—	—
Terra Nova Park	—	—
Banff and Yoho Parks	—	—
Glacier and Revelstoke Parks	—	—
Totals	195	345

10 December 1949 to 31 March 1966

Province	<i>Miles of Paving Contracts Approved</i>	<i>Mileage Completed</i>
Newfoundland	539	525
Prince Edward Island	71	71
Nova Scotia	234	183
New Brunswick	307	307
Quebec	139	141
Ontario	1,280	1,237
Manitoba	298	298
Saskatchewan	406	406
Alberta	281	281
British Columbia	550	550
Terra Nova Park	25	25
Banff and Yoho Parks	80	80
Glacier and Revelstoke Parks	35	35
Totals	4,245	4,139

*Route revised and shortened.

table no. 4 summary of contractual commitments

1 April 1965 to 31 March 1966

Province	<i>Total Commitment Approved</i>	<i>Canada's Share</i>
Newfoundland	\$ 4,166,655.81	\$ 3,131,690.23
Prince Edward Island	970,570.00	873,051.30
Nova Scotia	14,696,613.16	7,414,362.11
New Brunswick	15,313,968.81	13,084,594.39
Quebec	27,951,737.12	19,261,350.28
Ontario	8,978,498.97	4,124,455.02
Manitoba	107,090.00	53,545.00
Saskatchewan	1,498,995.50	749,497.75
Alberta	590,600.00	295,300.00
British Columbia	2,779,116.12	1,389,558.06
Totals	\$77,053,845.49	\$50,377,404.14

12 December 1949 to 31 March 1966

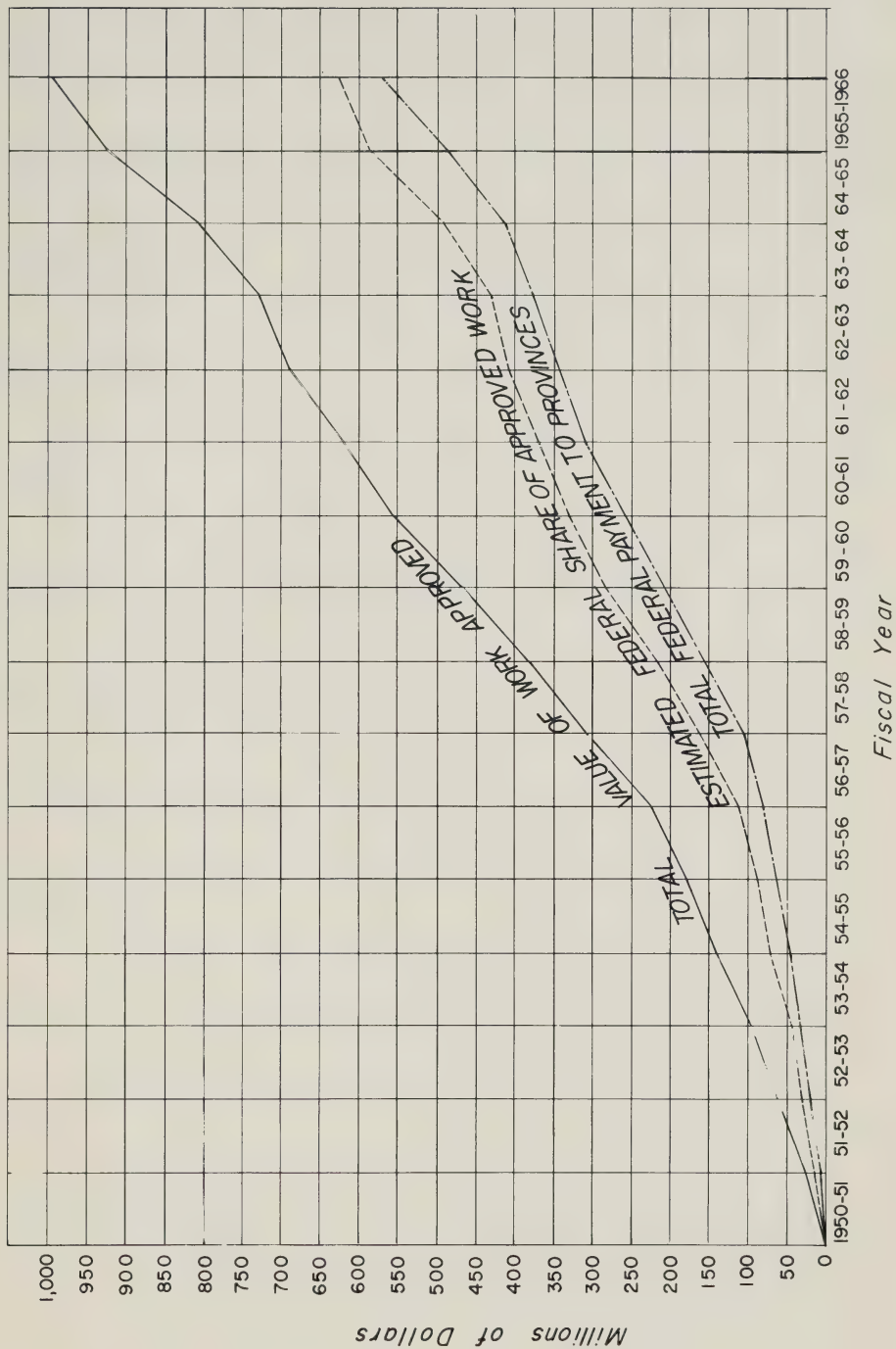
Province	<i>Total Commitment Approved</i>	<i>Canada's Share</i>
Newfoundland	\$122,073,359.76	\$ 95,585,849.51
Prince Edward Island	13,461,424.13	9,547,337.84
Nova Scotia	51,169,059.40	34,941,268.91
New Brunswick	94,599,734.09	69,681,696.71
Quebec	156,685,395.33	110,998,676.06
Ontario	240,513,073.39	123,952,869.66
Manitoba	32,178,673.28	18,935,704.30
Saskatchewan	30,878,027.00	15,858,676.39
Alberta	37,950,236.34	22,406,025.99
British Columbia	218,451,451.11	123,161,957.35
Totals	\$997,960,433.83	\$625,070,062.72

table no. 5 summary of payments to provincial governments

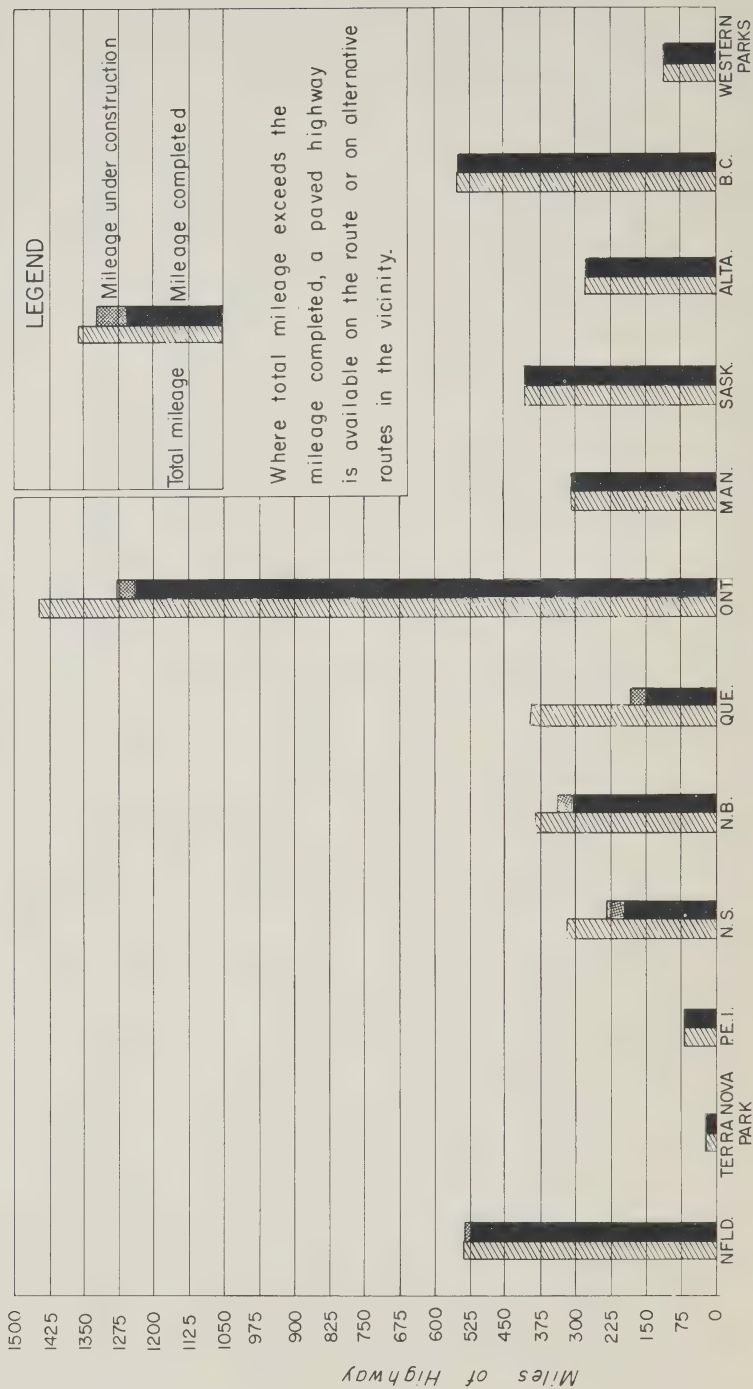
Province	Prior		Interim		New	
	Construction		Construction		Construction	Totals
Newfoundland	—		—		\$23,077,637.95	\$23,077,637.95
Prince Edward Island	—		—		1,091,121.21	1,091,121.21
Nova Scotia	—		—		6,802,208.52	6,802,208.52
New Brunswick	—		—		13,663,358.00	13,663,358.00
Quebec	—		—		33,531,692.71	33,531,692.71
Ontario	—		—		3,053,827.22	3,053,827.22
Manitoba	—		—		158,121.09	158,121.09
Saskatchewan	—		—		195,389.83	195,389.83
Alberta	—		—		18,995.84	18,995.84
British Columbia	—		—		1,830,475.77	1,830,475.77
Totals	—		—		\$83,422,828.14	\$83,422,828.14

Province	Prior		Interim		New	
	Construction		Construction		Construction	Totals
Newfoundland	—		\$ 156,445.23		\$ 86,664,142.77	\$ 86,820,588.00
Prince Edward Island	\$ 288,383.09		—		8,811,919.04	9,100,302.13
Nova Scotia	88,501.37		—		28,855,037.33	28,943,538.70
New Brunswick	1,447,800.14		193,576.71		62,675,807.58	64,317,184.43
Quebec	—		—		85,911,825.75	85,911,825.75
Ontario	3,565,543.48		299,790.79		118,459,693.75	122,325,028.02
Manitoba	887,446.75		17,958.54		17,850,448.03	18,755,853.32
Saskatchewan	270,753.29		3,103.38		15,367,961.66	15,641,818.33
Alberta	475,943.78		14,975.87		21,361,202.18	21,852,121.83
British Columbia	3,190,102.08		692,171.05		115,698,631.16	119,580,904.29
Totals	\$10,214,473.98		\$1,378,021.57		\$561,656,669.25	\$573,249,164.80

CONTRACTUAL COMMITMENTS AND PAYMENTS



MILEAGE OF HIGHWAY CONSTRUCTED UNDER THE TRANS-CANADA HIGHWAY ACT AND AGREEMENTS



Appendix “A”

General Specifications of the Highway

1. Right-of-Way

The minimum width of the right-of-way shall be one hundred (100) feet. Where the highway runs through densely populated areas thus involving heavy expenditures, a minimum initial width of sixty-six (66) feet will be acceptable.

2. Pavement

(a) The width of pavement shall be a maximum of twenty-four (24) feet, except when special facilities such as acceleration — deceleration lanes are approved, and a minimum of twenty-two (22) feet.

(b) The pavement shall be a Bituminous-Mineral type generally described as a Bituminous Hot-Mix with graded aggregate.

(c) The compacted thickness of the bituminous-mineral pavement shall be a minimum of three (3) inches.

(d) Where it is desirable to lay concrete pavement, the thickness and type customarily used by the provinces will be acceptable.

3. Shoulders

The width of the shoulders on each side of the pavement shall be ten (10) feet, where it is economically possible to construct to this width. Lesser widths will be acceptable to a minimum of five (5) feet where terrain and/or economy makes this necessary.

4. Obstructions

The minimum distance between the edge of the pavement and any obstruction on the shoulders shall be one (1) foot less than the width of the shoulders.

5. Stone base course, sub-base, elevation of water table level

The construction of the stone base course, the sub-base and the drainage system controlling the elevation of the water table level shall be constructed in such a manner that combined, they will produce a roadway having a load bearing capacity for a repeating 18,000 pound axle load.

6. Curvature

The curvature of the centre line of pavement shall not exceed six (6) degrees, except where terrain does not permit this with reasonable economy. Where possible, it is considered desirable to reduce the maximum curvature to three (3) degrees.

7. Gradient

The maximum gradient on the Highway shall not exceed six (6) per cent, except in cases where this is not economically feasible, where seven (7) or eight (8) per cent will be acceptable for short distances.

8. Site Distances

Where terrain permits, the minimum horizontal sight distance, and the minimum vertical sight distance, shall be six hundred (600) feet. This means that a driver of a vehicle will be able to see an object six inches high on the pavement ahead of him at a distance of 600 feet, when his eyes are four (4) feet six (6) inches above the pavement.

9. Bridges

- (a) Loading H20-S16.
- (b) Overhead clearances, for full width between curbs, 14 feet 6 inches.
- (c) For length of bridge of 30 feet or less, the roadway between curbs shall be the aggregate width of pavement and shoulders.
- (d) For length of bridge over 30 feet and up to 100 feet, the minimum roadway between curbs shall be 27 feet and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.
- (e) For length of bridge over 100 feet, the minimum width between curbs shall be 24 feet, and the minimum width of curbs on each side shall be 18 inches, or the deck design shall provide equivalent clearance.

Appendix "B"
Federal District Engineers
Development Engineering Branch
Engineering and Construction Division

NEWFOUNDLAND

F. H. Johnson,
P.O. Box 4600, Bldg. 301,
Pleasantville,
St. John's Nfld.
Phone: 578-4171-5

PRINCE EDWARD ISLAND

F. E. Kimball,
Box 1268, Dominion Bldg.,
Charlottetown, P.E.I.
Phone: 894-3814 - 6555

NOVA SCOTIA

F. E. Kimball,
Box 2247, Room 717,
Ralston Bldg.,
Halifax, N.S.
Phone: 422-1561

NEW BRUNSWICK

F. E. Kimball,
Box 1296, Federal Bldg.,
Fredericton, N.B.
Phone: 454-5575

QUEBEC

J. C. Beauchamp,
Champlain Harbour Station,
Wolfe's Cove,
Quebec 2, P.Q.
Phone: 529-2981

ONTARIO

H. F. Peters,
241 Jarvis Street,
Toronto 2, Ont.
Phone: 369-4985

MANITOBA

J. A. Flatt,
201 Federal Bldg.,
269 Main Street,
Winnipeg 1, Man.
Phone: WH3-0601

SASKATCHEWAN

J. A. Flatt,
2027 Broad St.,
Regina, Sask.
Phone: 523-2331

ALBERTA

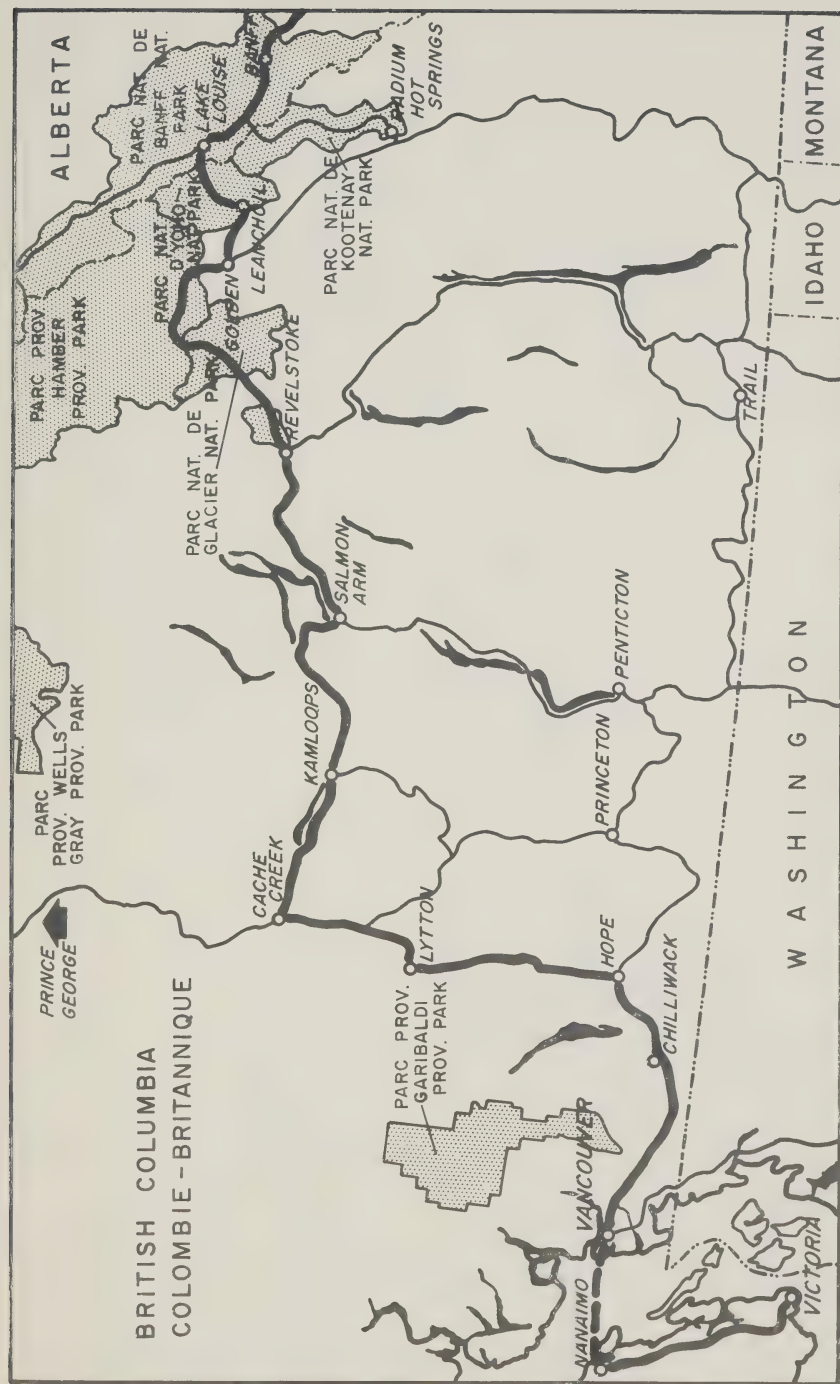
A. L. Perley,
10225 - 100 Ave.,
Box 488,
Edmonton, Alta.
Phone: 429-2541

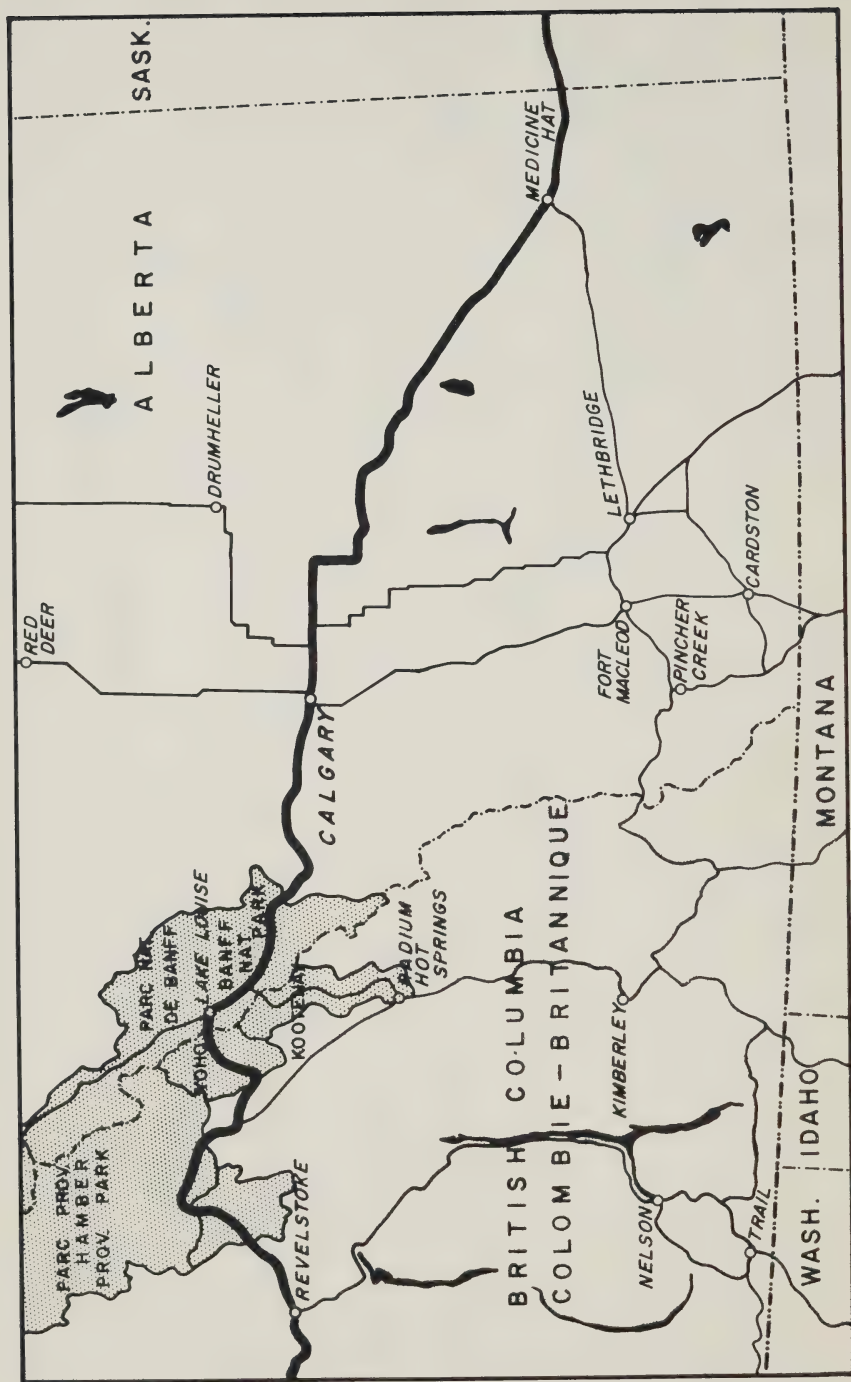
BRITISH COLUMBIA

B. G. Harvey,
Room 211,
816 Government St.,
Victoria, B.C.
Phone: EV2-5434

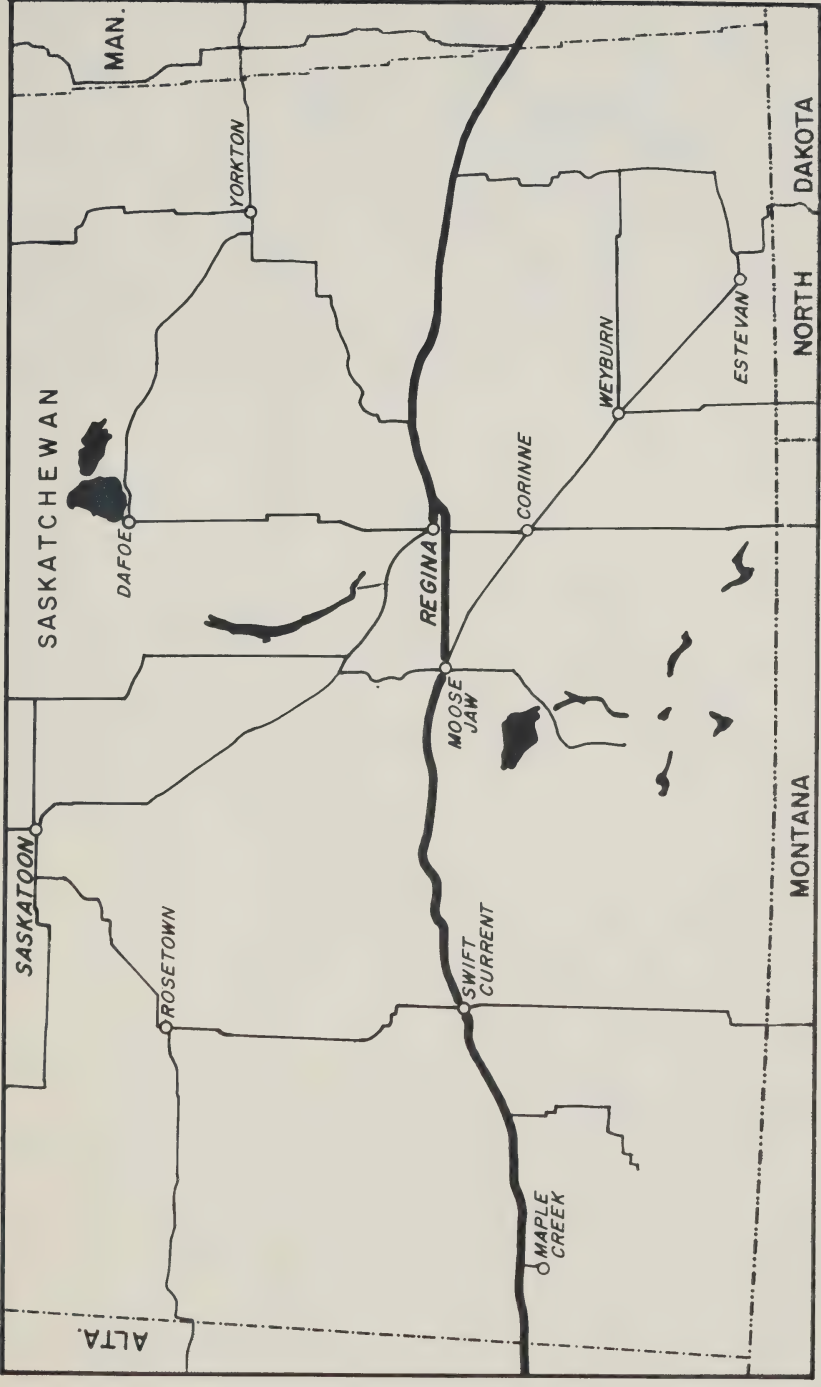
WESTERN NATIONAL PARKS

N. A. Huculak,
Customs Bldg.,
11 Ave. and 1 St. S.E.,
Calgary, Alta.
Phone: 269-1991

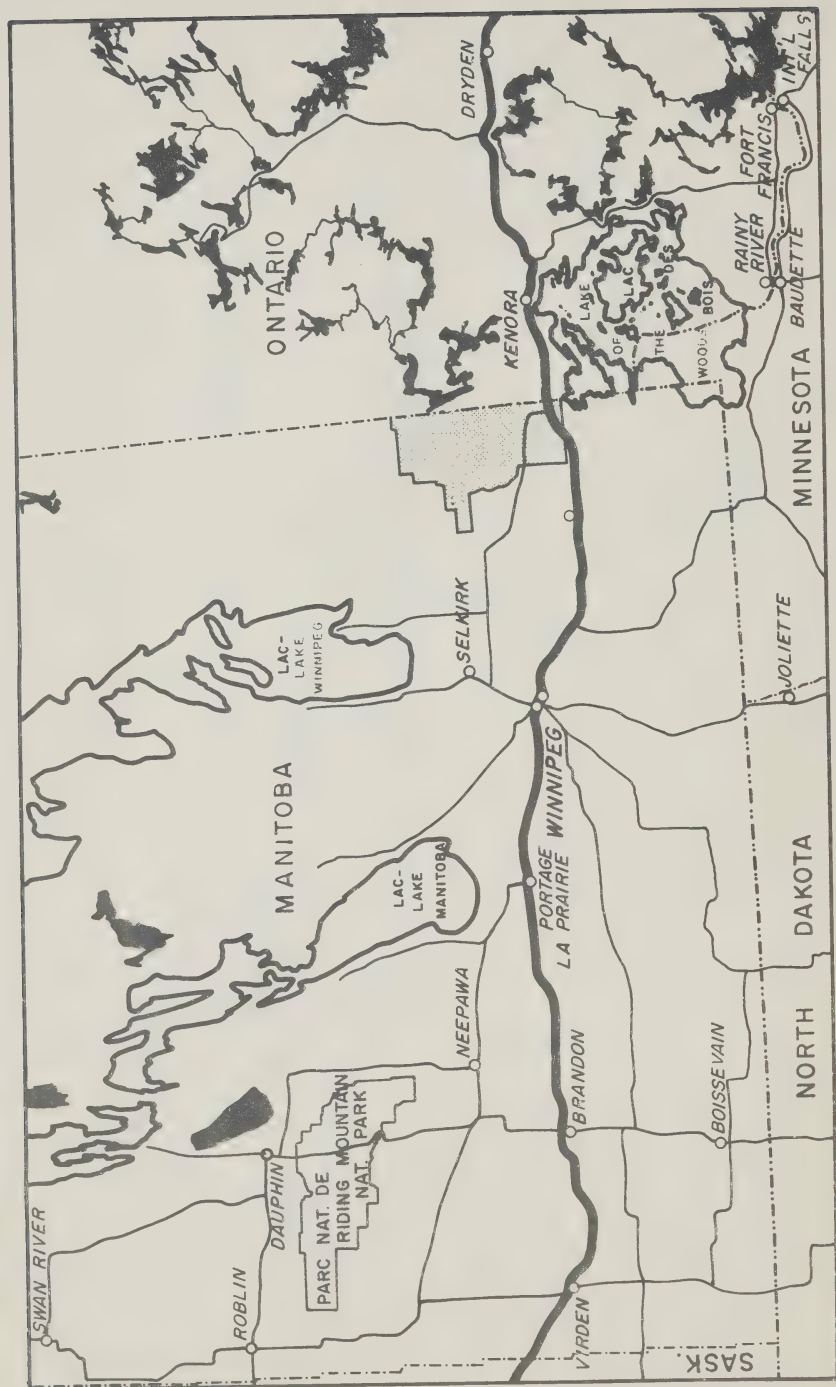


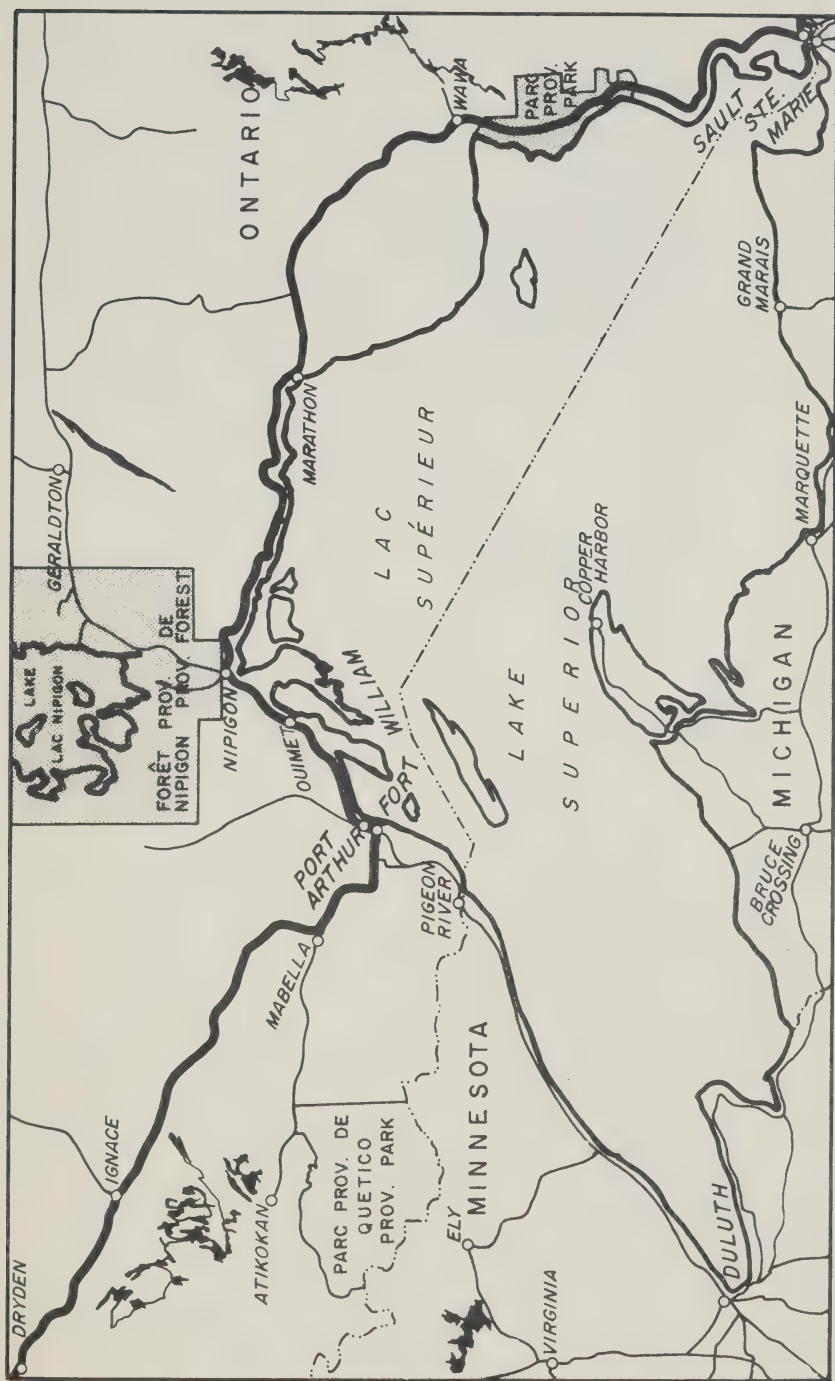


TRANS - CANADA HIGHWAY - ALBERTA - ROUTE TRANSCANADIENNE

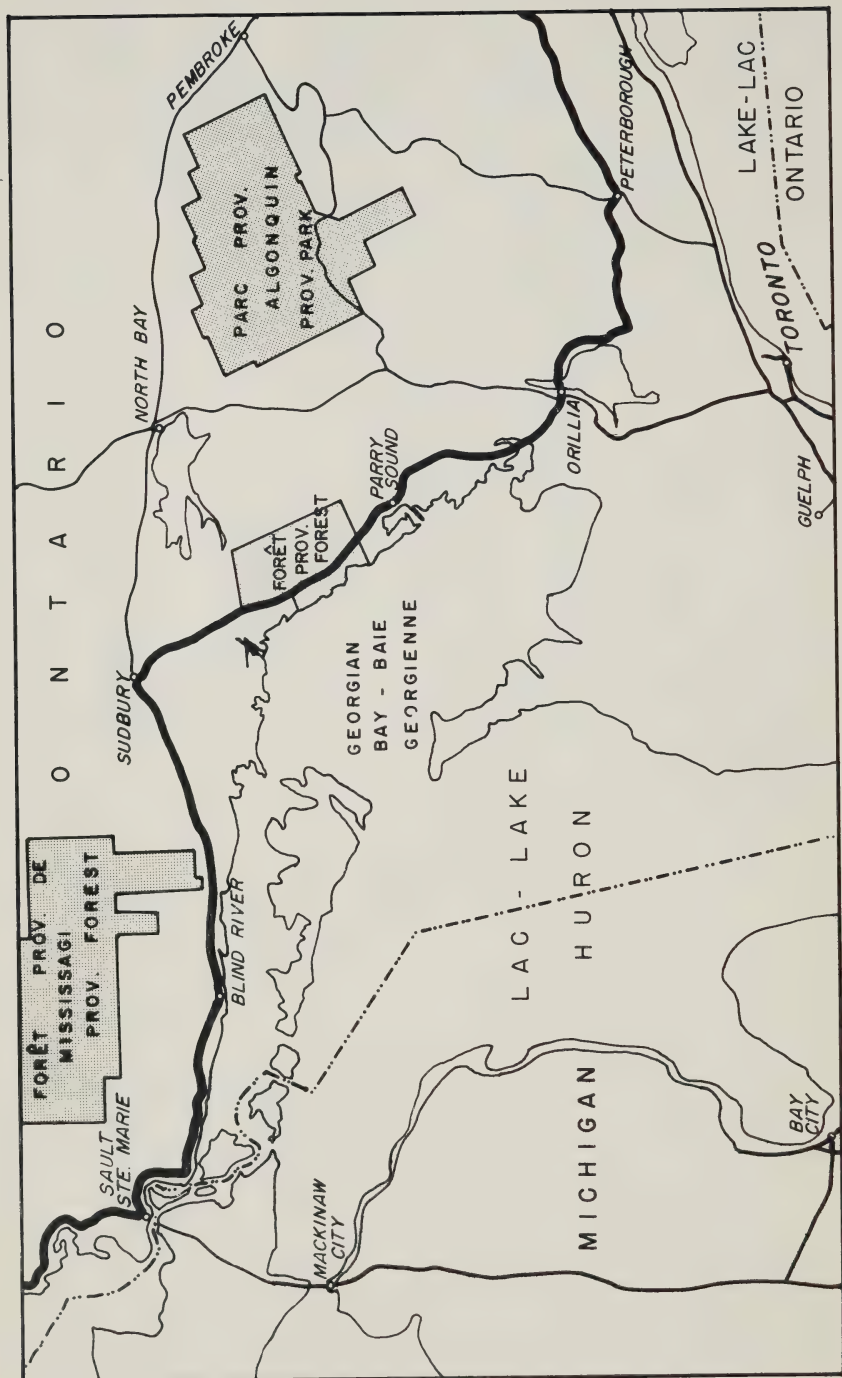


TRANS - CANADA HIGHWAY — SASKATCHEWAN — ROUTE TRANSCANADIENNE

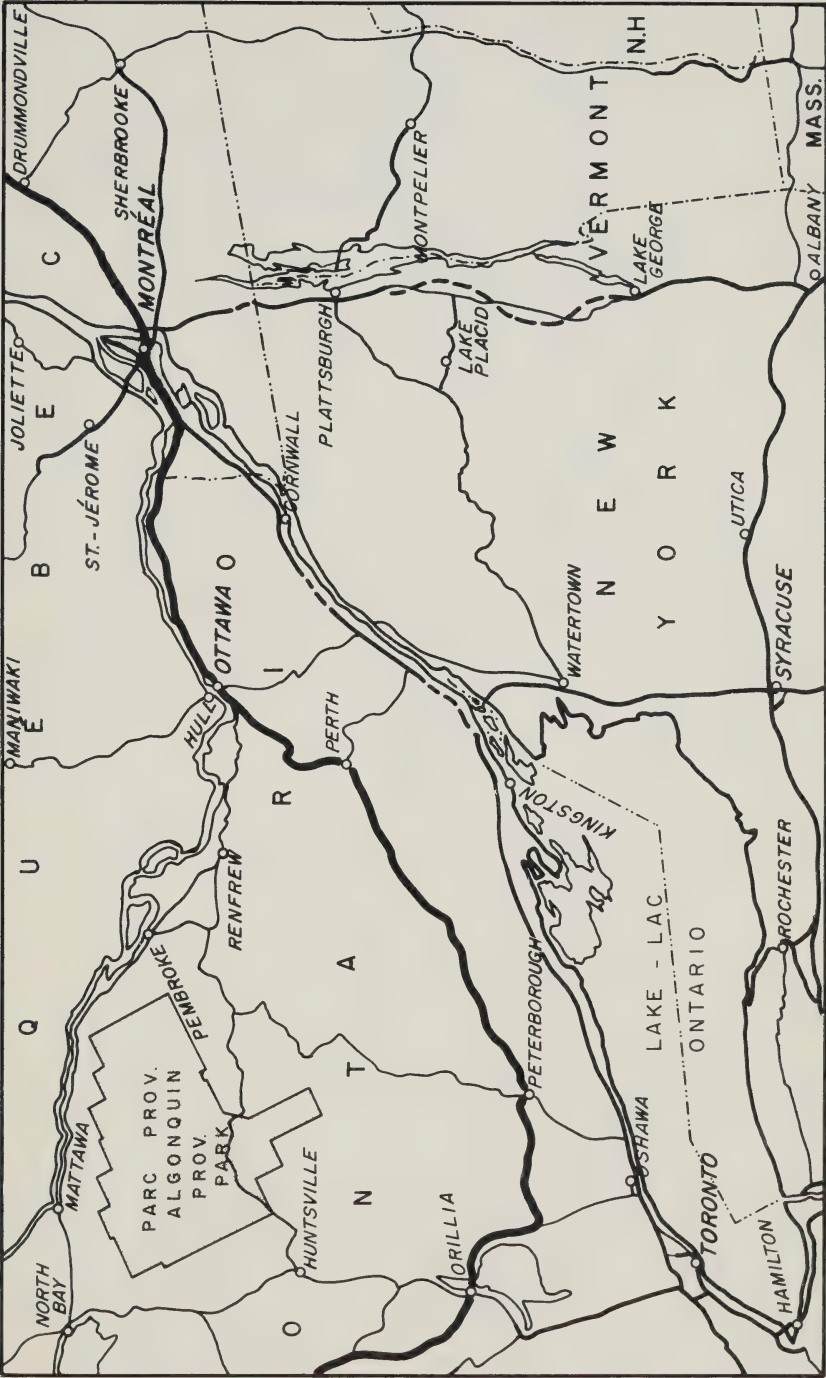




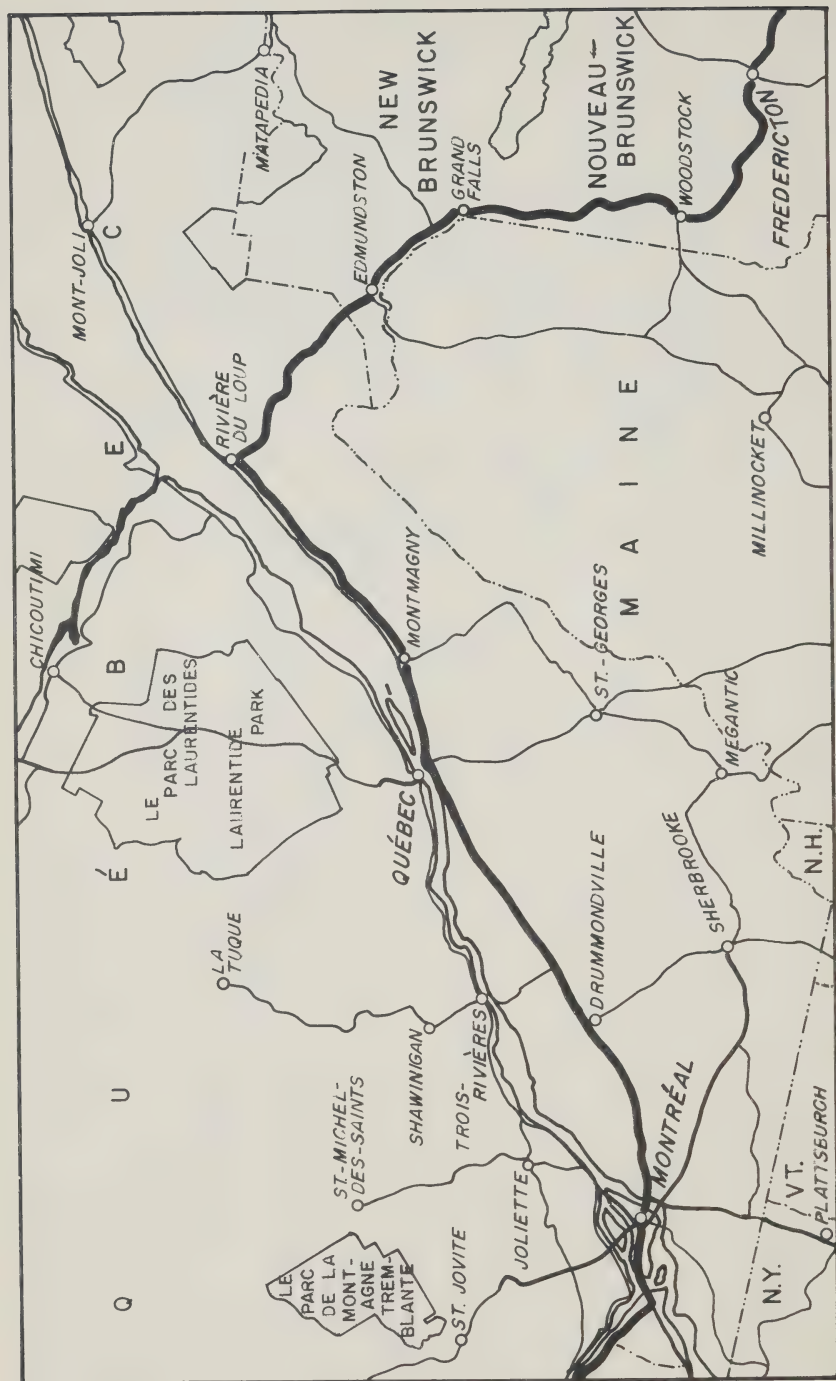
TRANS-CANADA HIGHWAY — ONTARIO — ROUTE TRANSCANADIENNE



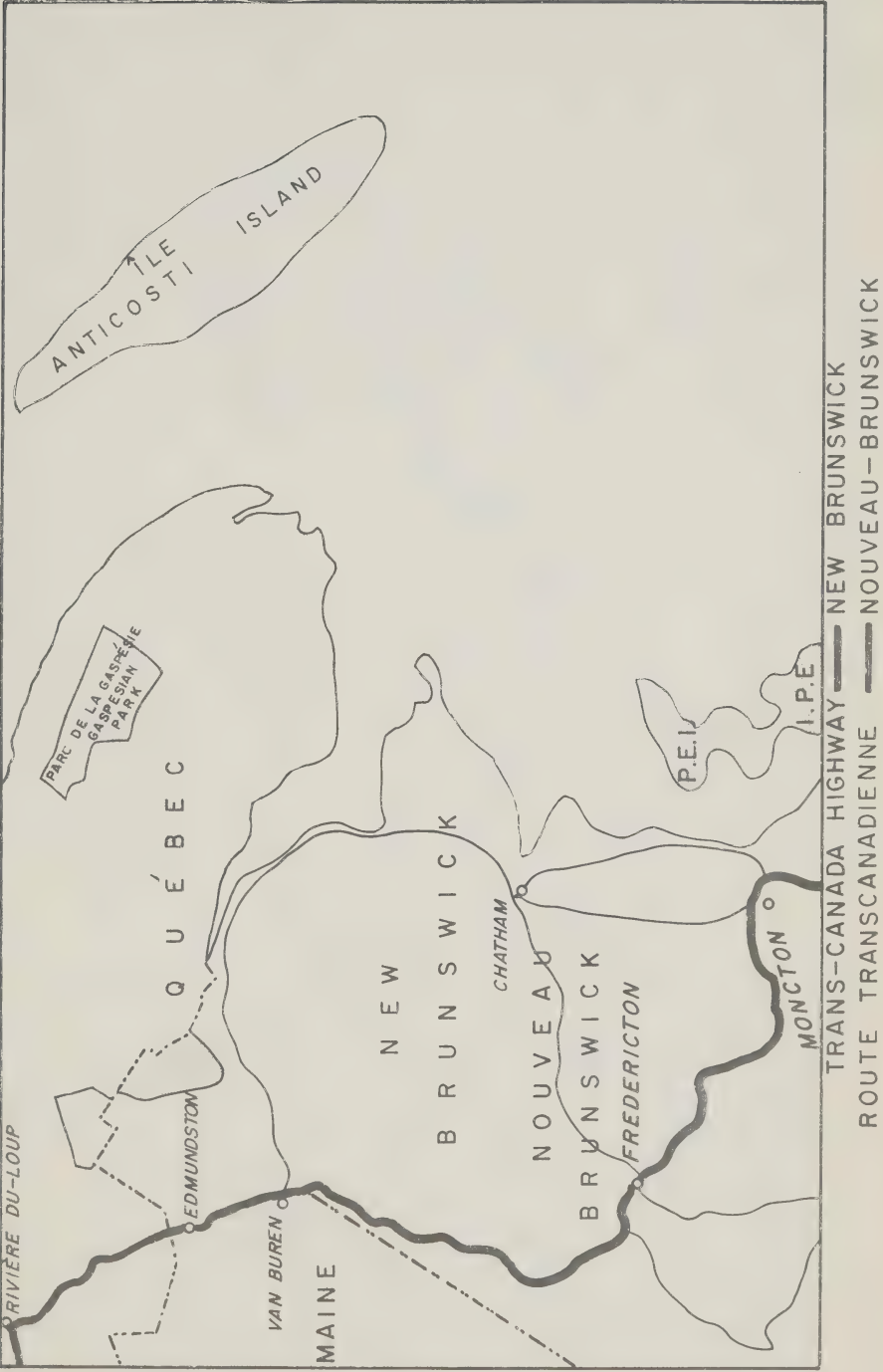
TRANS-CANADA HIGHWAY — ONTARIO — ROUTE TRANSCANADIENNE



TRANS-CANADA HIGHWAY — ONTARIO — ROUTE TRANSCANADIENNE

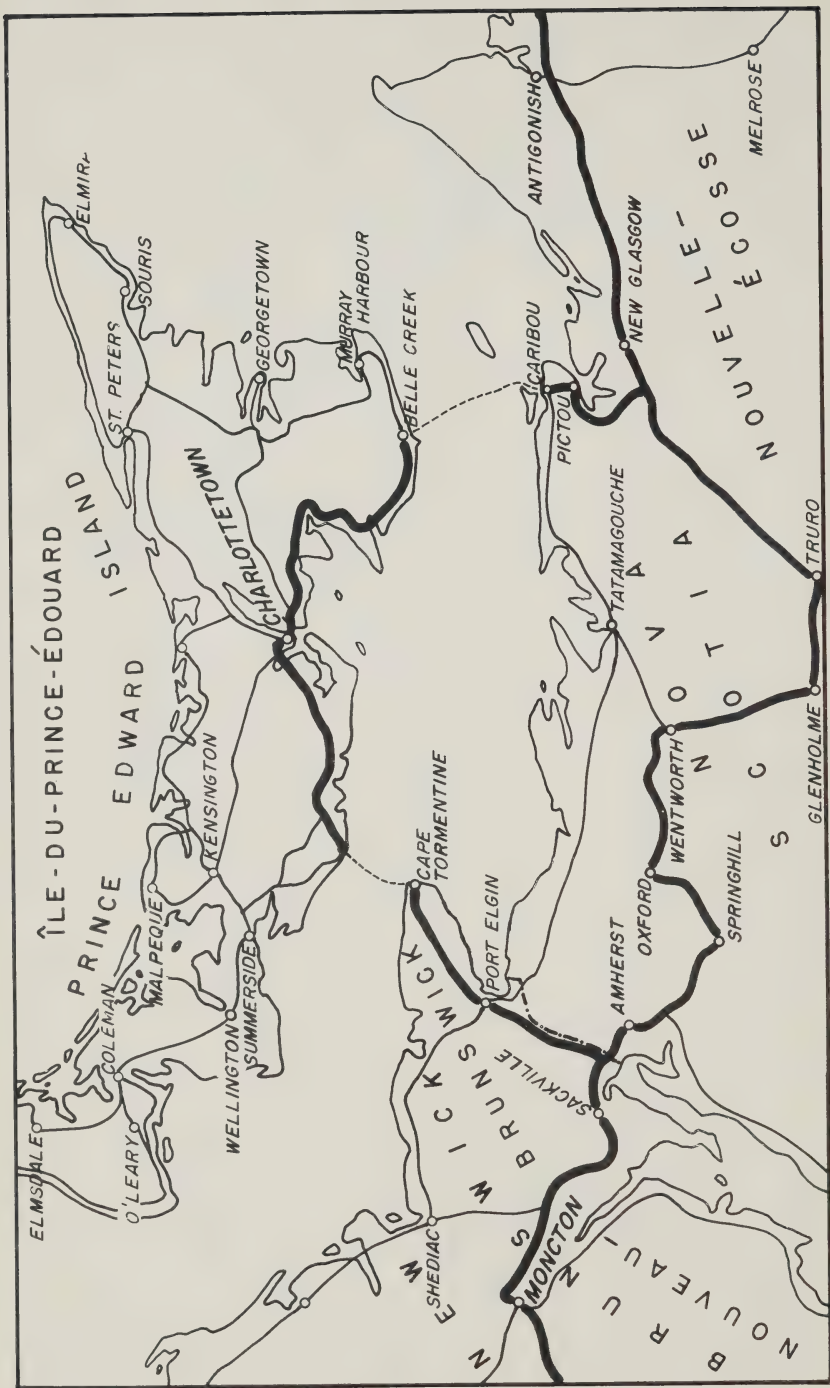


TRANS - CANADA HIGHWAY — QUÉBEC — ROUTE TRANSCANADIENNE



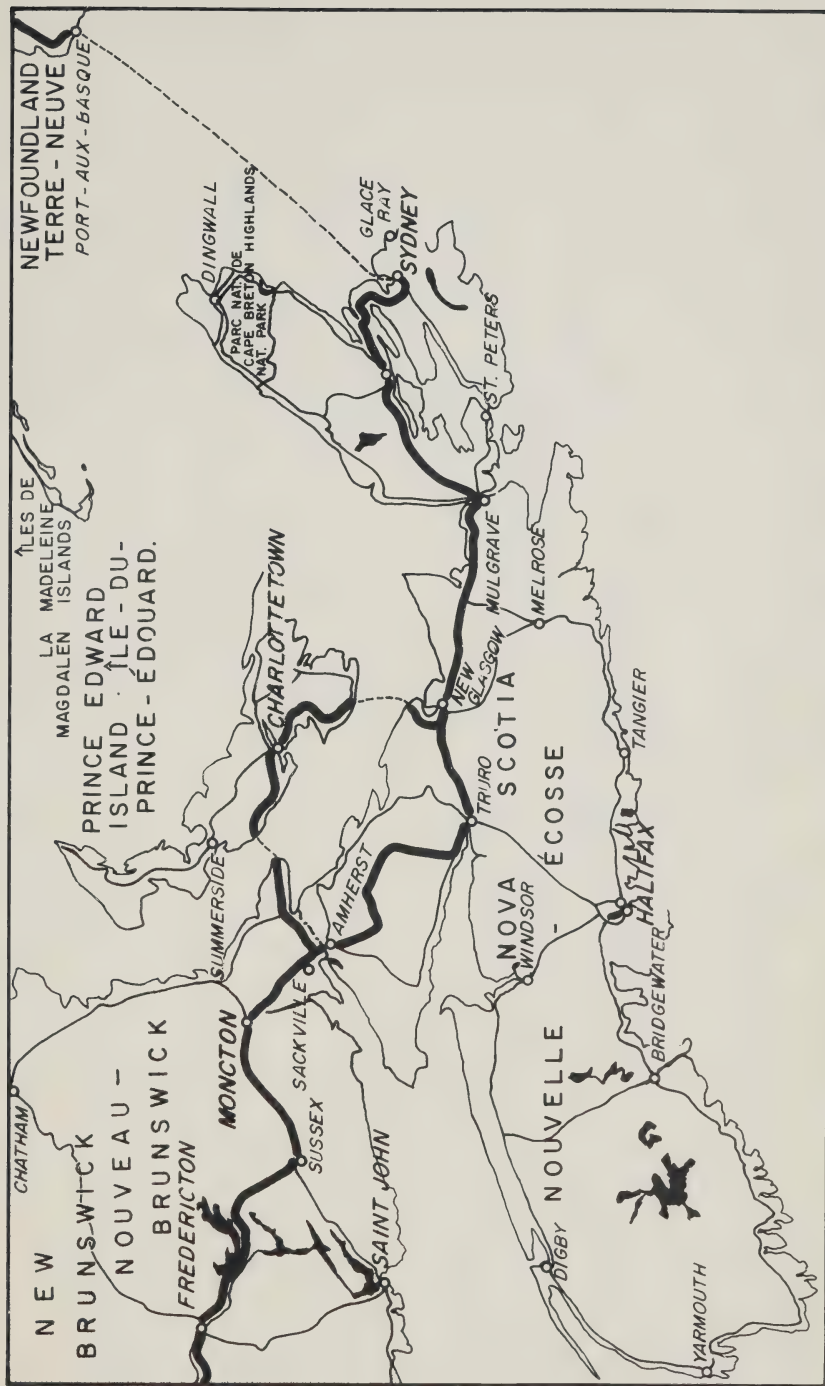
TRANS-CANADA HIGHWAY — NEW BRUNSWICK

ROUTE TRANSCANADIENNE — NOUVEAU-BRUNSWICK

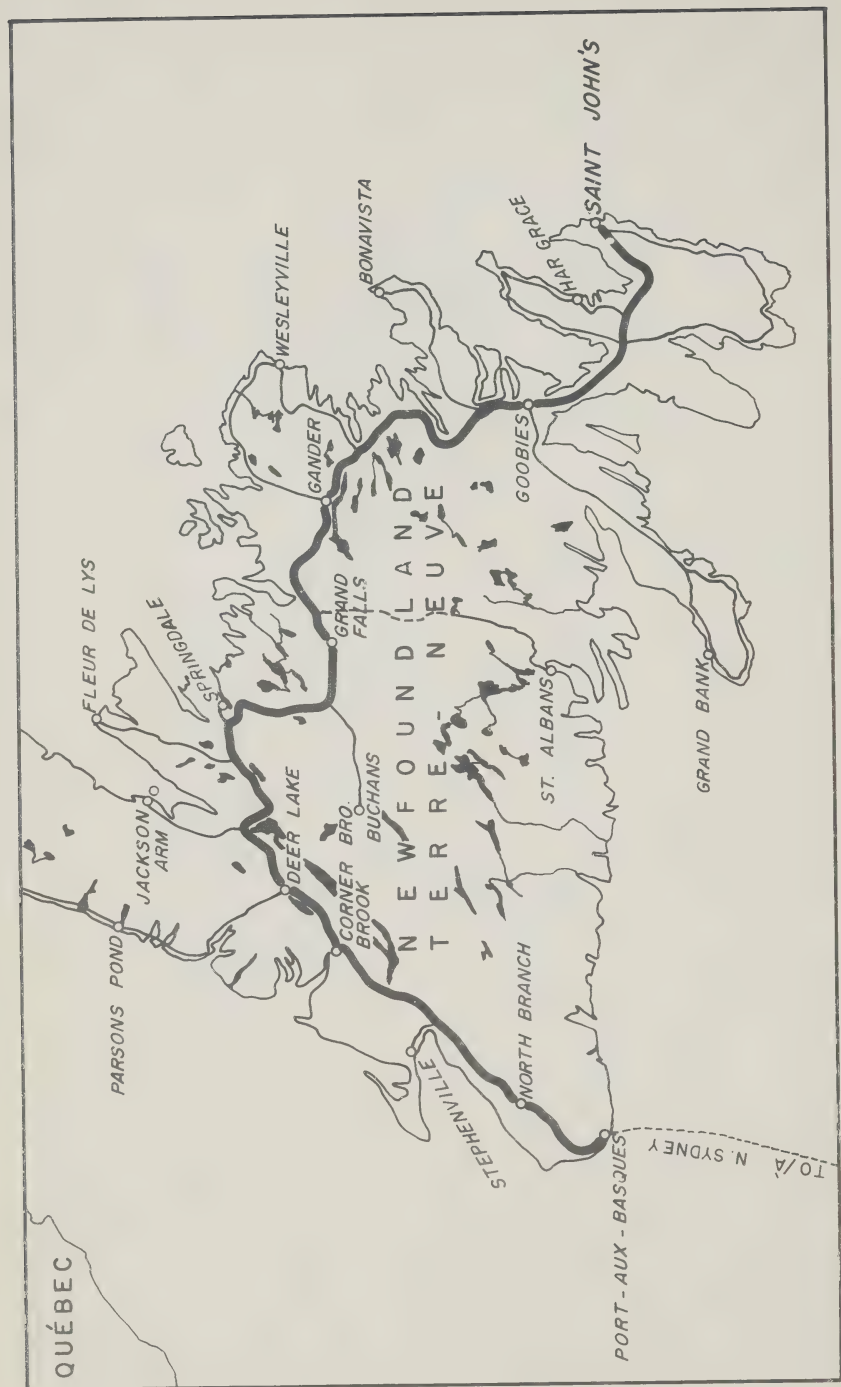


TRANS - CANADA HIGHWAY
 ROUTE TRANSCANADIENNE

PRINCE EDWARD ISLAND
 ÎLE-DU-PRINCE-ÉDOUARD



TRANS — CANADA HIGHWAY — NOVA SCOTIA
 ROUTE TRANSCANADIENNE — NOUVELLE-ÉCOSSE



APPENDICE "B"

Ingenieurs de district fédéraux Direction du génie (aménagement) Division du génie et de la construction

TERRE-NEUVE	F. N. Johnson	Case postale 4600, édifice 301	Pleasantville	Saint-Jean (T.-N.)	Téléphone: 578-4171 - 5
ÎLE-DU-PRINCE-ÉDOUARD	F. E. Kimball	Case 1268, édifice Dominion	Charlottetown (I. P.-É.)	Téléphone: 894-3814 - 6555	
NOUVELLE-ÉCOSSE	F. E. Kimball	Case 2247, pièce 717	Edifice Ralston	Halifax (N.-É.)	Téléphone: 422-1561
NOUVEAU-BRUNSWICK	F. E. Kimball	Case 1296, édifice fédéral	Fredericton (N.-B.)	Téléphone: 454-5575	
QUÉBEC	J.-C. Beauchamp	Gare maritime Champlain	Anse-au-Foulon	Québec 2 (P.-Q.)	Téléphone: 529-2981
COLOMBIE-BRITANNIQUE	B. G. Harvey	Pièce 211	816, rue Gouvernement	Victoria (C.-B.)	Téléphone: EV. 2-5434
PARCS NATIONAUX DE L'OUEST	N. A. Huculak	Edifice des Douanes	11 ^e Avenue et 1 ^e Rue S.-E.	Calgary (Alb.)	Téléphone: 269-1991

6. Bombement

Le bombement de l'axe du pavé ne dépassera pas six (6) degrés, sauf où le terrain ne le permet pas avec une économie raisonnable. Aux endroits où la chose est possible, on estime qu'il est opportun de réduire le bombement maximum à trois (3) degrés.

7. Pente

La pente de la route sera d'au plus 6 p. 100, sauf dans les cas où la chose est économiquement impossible, alors que 7 ou 8 p. 100 seront acceptables sur des courtes distances.

8. Distances à vue

Aux endroits où le terrain le permet, la distance à vue horizontale maximum et la distance à vue verticale minimum seront de six cents (600) pieds. En d'autres termes, le conducteur d'une voiture pourra voir un objet de six pouces de hauteur placé sur le pavé à 600 pieds en avant de lui, lorsque ses yeux se trouvent à quatre (4) pieds et six (6) pouces au-dessus du pavé.

9. Ponts

- a) Charge H20-S16.
- b) Dégagements supérieurs, sur la pleine largeur entre les bordures, 14 pieds et 6 pouces.
- c) Pour les ponts de 30 pieds ou moins de longueur, la chaussée entre les bordures aura la largeur réunie du pavé et des accotements.
- d) Pour les ponts de plus de 30 pieds et jusqu'à 100 pieds de longueur, la chaussée minimum entre les bordures aura 27 pieds de largeur minimum des bordures de chaque côté sera de 18 pouces, ou le tablier offrira un dégagement équivalent.
- e) Pour les ponts de plus de 100 pieds de longueur, la largeur minimum entre les bordures sera de 24 pieds et la largeur minimum des bordures de chaque côté sera de 18 pouces, ou le tablier offrira un dégagement équivalent.

APPENDICE "A" Devis général de la route

1. Emprise

La largeur minimum de l'emprise sera de cent (100) pieds. Lorsque la route traverse des régions peuplées entraînant ainsi de fortes dépenses, une largeur minimum initiale de soixante-six (66) pieds sera acceptable.

2. Pavé

a) La largeur du pavé sera d'au plus vingt-quatre (24) pieds, sauf lorsque des ouvrages particuliers tels que voies d'accélération et de ralentissement sont approuvés, et d'au moins vingt-deux (22) pieds.

b) Le pavé sera d'un type bitumineux-minéral généralement appelé mélange bitumineux malaxé à chaud à l'usine et contenant des éléments triés.

c) Une fois rendu compact, le pavé bitumineux-minéral n'aura pas moins de trois (3) pouces d'épaisseur.

d) Aux endroits où il est opportun de confectionner un pavé en béton, l'épaisseur et le type utilisés habituellement par les provinces seront acceptables.

3. Accotements

La largeur des accotements de chaque côté du pavé sera de dix (10) pieds, lorsqu'il est économiquement possible de les confectionner à cette largeur. Des largeurs plus faibles seront acceptables jusqu'à un minimum de cinq (5) pieds lorsque le terrain et (ou) l'économie rendent la chose nécessaire.

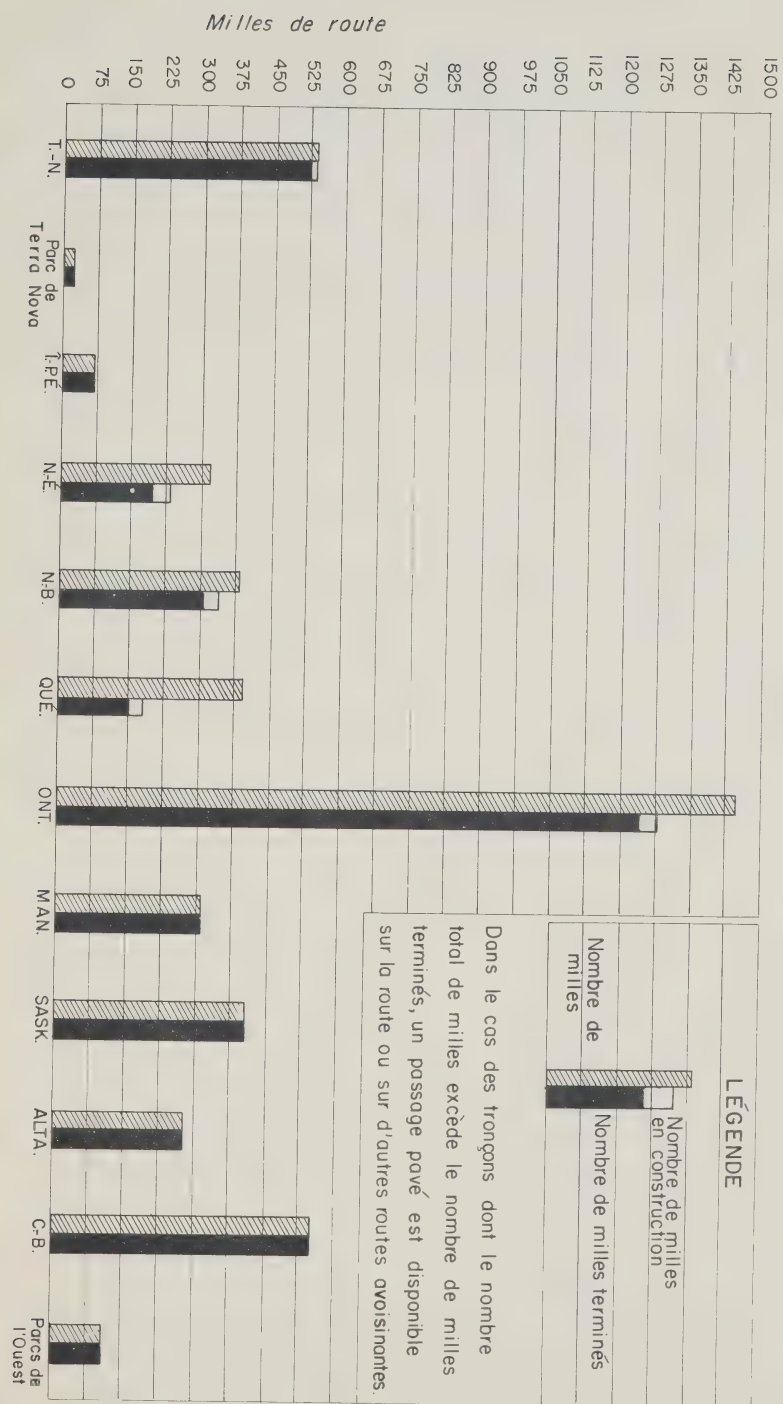
4. Obstacles

La distance minimum entre le bord du pavé et tout obstacle sur les accotements sera d'un (1) pied de moins que la largeur des accotements.

5. Infrastructure en pierre, assise et élévation du niveau de la nappe aquifère

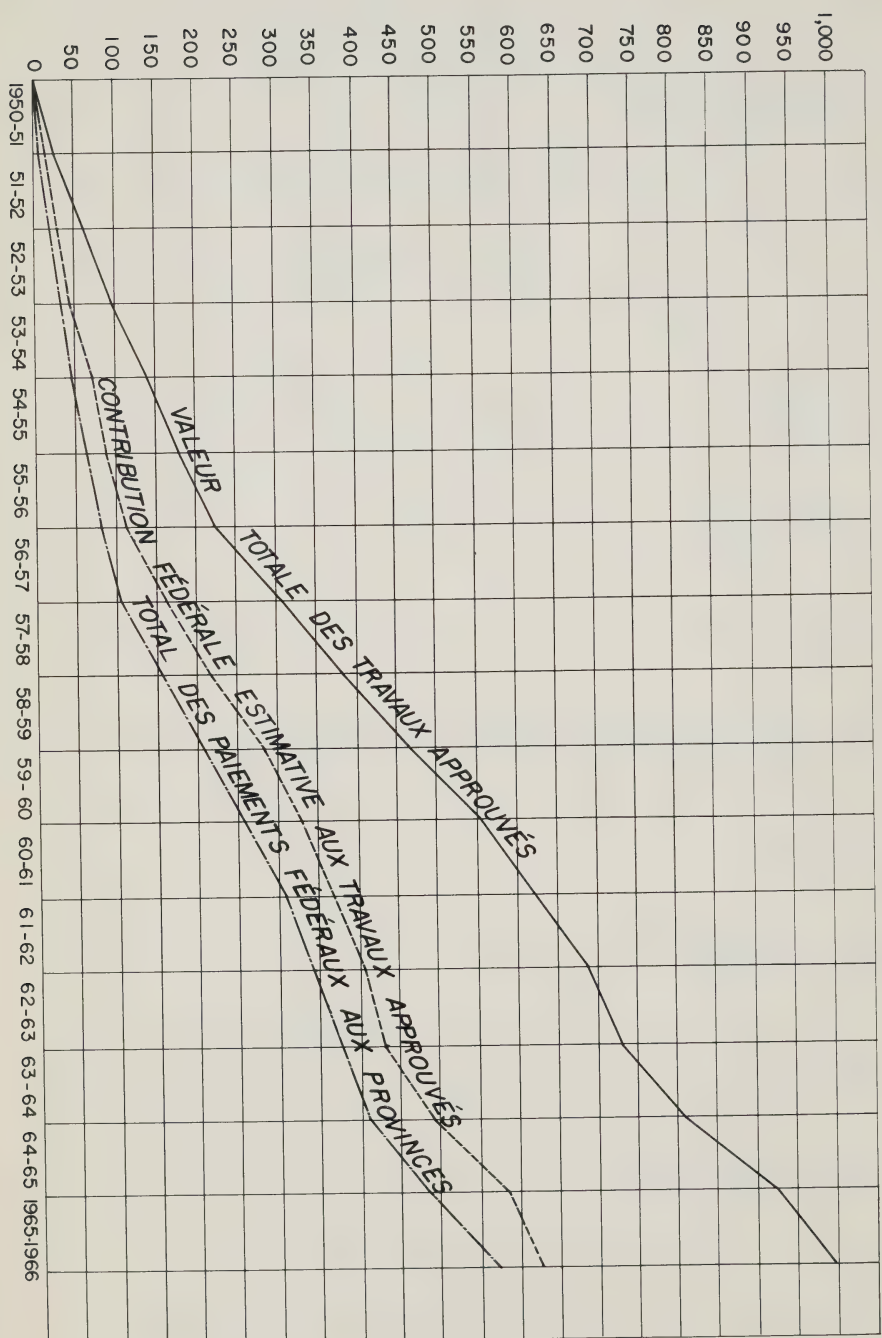
La confection de l'infrastructure en pierre, de l'assise et du système de drainage régularisant l'élévation du niveau de la nappe aquifère sera effectuée de façon que le tout produise une chaussée ayant une capacité portante de charge d'essieu périodique de 18,000 livres.

NOMBRE DE MILLES CONSTRUITS EN VERTU DE LA LOI ET DES CONVENTIONS SUR LA ROUTE TRANSCANADIENNE



ENGAGEMENTS ET PAIEMENTS CONTRACTUELS

Millions de dollars



Année financière

tableau no 5 Résumé des paiements faits aux gouvernements provinciaux

Province	Construction		Nouvelle Construction	Total
	<i>préalable</i>	<i>provisoire</i>		
Terre-Neuve	—	—	\$23,077,637.95	\$23,077,637.95
Ile-du-Prince-Édouard	—	—	1,091,121.21	1,091,121.21
Nouvelle-Écosse	—	—	6,802,208.52	6,802,208.52
Nouveau-Brunswick	—	—	13,663,358.00	13,663,358.00
Québec	—	—	33,531,692.71	33,531,692.71
Ontario	—	—	3,053,827.22	3,053,827.22
Manitoba	—	—	158,121.09	158,121.09
Saskatchewan	—	—	195,389.83	195,389.83
Alberta	—	—	18,995.84	18,995.84
Colombie-Britannique	—	—	1,830,475.77	1,830,475.77
Totaux	—	—	\$83,422,828.14	\$83,422,828.14

Province	Construction		Nouvelle Construction	Total
	<i>préalable</i>	<i>provisoire</i>		
Terre-Neuve	—	\$ 156,445.23	\$ 86,664,142.77	\$ 86,820,588.00
Ile-du-Prince-Édouard	\$ 288,383.09	—	8,811,919.04	9,100,302.13
Nouvelle-Écosse	88,501.37	—	28,855,037.33	28,943,538.70
Nouveau-Brunswick	1,447,800.14	193,576.71	62,675,807.58	64,317,184.43
Québec	—	—	85,911,825.75	85,911,825.75
Ontario	3,565,543.48	299,790.79	118,459,693.75	122,325,028.02
Manitoba	887,446.75	17,958.54	17,850,448.03	18,755,853.32
Saskatchewan	270,753.29	3,103.38	3,103,961.66	15,641,818.33
Alberta	475,943.78	14,975.87	21,361,202.18	21,852,121.83
Colombie-Britannique	3,190,102.08	692,171.05	115,698,631.16	119,580,904.29
Totaux	\$10,214,473.98	\$1,378,021.57	\$561,656,669.25	\$573,249,164.80

Du 10 décembre 1949
au 31 mars 1966

Du 1^{er} avril 1965
au 31 mars 1966

tableau no 4—Résumé des engagements contractuels

Du 1^{er} avril 1965 au 31 mars 1966

<i>Montant total</i>		
Province	<i>des engagements</i>	<i>approuvés</i>
<i>Part du</i>		
<i>Canada</i>		
Terre-Neuve	\$ 4,166,655.81	\$ 3,131,690.23
Ile-du-Prince-Édouard	970,570.00	873,051.30
Nouvelle-Écosse	14,696,613.16	7,414,362.11
Nouveau-Brunswick	15,313,968.81	13,084,594.39
Québec	27,951,737.12	19,261,350.28
Ontario	8,978,498.97	4,124,455.02
Manitoba	107,090.00	53,545.00
Saskatchewan	1,498,995.50	749,497.75
Alberta	590,600.00	295,300.00
Colombie-Britannique	2,779,116.12	1,389,558.06
Totaux	\$77,053,845.49	\$50,377,404.14

Du 12 décembre 1949 au 31 mars 1966

<i>Montant total</i>		
Province	<i>des engagements</i>	<i>approuvés</i>
<i>Part du</i>		
<i>Canada</i>		
Terre-Neuve	\$122,073,359.76	\$ 95,585,849.51
Ile-du-Prince-Édouard	13,461,424.13	9,547,337.84
Nouvelle-Écosse	51,169,059.40	34,941,268.91
Nouveau-Brunswick	94,599,734.09	69,681,696.71
Québec	156,685,395.33	110,998,676.06
Ontario	240,513,073.39	123,952,869.66
Manitoba	32,178,673.28	18,935,704.30
Saskatchewan	30,878,027.00	15,858,676.39
Alberta	37,950,236.34	22,406,025.99
Colombie-Britannique	218,451,451.11	123,161,957.35
Totaux	\$997,960,433.83	\$625,070,062.72

tableau no 3—Pavage

Du 1^{er} avril 1965 au 31 mars 1966

Province	Milles de pavage dont on a approuvé les contrats	Nombre de milles ter- minés
Terre-Neuve	—	206
Ile-du-Prince-Edouard	—	—
Nouvelle-Ecosse	112	61
Nouveau-Brunswick	37	37
Québec	—7*	32
Ontario	64	20
Manitoba	—11*	—11*
Saskatchewan	—	—
Alberta	—	—
Colombie-Britannique	—	—
Parc de Terra Nova	—	—
Parcs de Banff	—	—
et d'Yoho	—	—
Parcs de Glacier	—	—
et de Revelstoke	—	—
Totaux	195	345

Du 10 décembre 1949 au 31 mars 1966

Province	Milles de pavage dont on a approuvé les contrats	Nombre de milles ter- minés
Terre-Neuve	539	525
Ile-du-Prince-Edouard	71	71
Nouvelle-Ecosse	234	183
Nouveau-Brunswick	307	307
Québec	139	141
Ontario	1,280	1,237
Manitoba	298	298
Saskatchewan	406	406
Alberta	281	281
Colombie-Britannique	550	550
Parc de Terra Nova	25	25
Parcs de Banff	80	80
et d'Yoho	80	80
Parcs de Glacier	35	35
et de Revelstoke	35	35
Totaux	4,245	4,139

*Parcours modifié et raccourci.

tableau no 2—Nivelllement

Du 1^{er} avril 1965 au 31 mars 1966

Province		Milles de nivelllement dont on a approuvé les contrats		Nombre de milles ter- minés	
Province		Milles de nivelllement dont on a approuvé les contrats		Nombre de milles ter- minés	
Totaux	94			152	
Terre-Neuve	—			32	
Ile-du-Prince-Edouard	—			—	
Nouvelle-Ecosse	31			41	
Nouveau-Brunswick	39			38	
Québec	6			13	
Ontario	18			36	
Manitoba	—			—8*	
Saskatchewan	—			—	
Alberta	—			—	
Colombie-Britannique	—			—	
Parc de Terra Nova	—			—	
Parcs de Banff	—			—	
et d'Yoho	—			—	
Parcs de Glacier	—			—	
et de Revelstoke	—			—	

Du 10 décembre 1949 au 31 mars 1966

Province		Milles de nivelllement dont on a approuvé les contrats		Nombre de milles ter- minés	
Province		Milles de nivelllement dont on a approuvé les contrats		Nombre de milles ter- minés	
Totaux	4,210			4,149	
Terre-Neuve	539			539	
Ile-du-Prince-Edouard	71			71	
Nouvelle-Ecosse	216			201	
Nouveau-Brunswick	344			336	
Québec	189			174	
Ontario	1,224			1,209	
Manitoba	250			242	
Saskatchewan	406			406	
Alberta	281			281	
Colombie-Britannique	550			550	
Parc de Terra Nova	25			25	
Parcs de Banff	80			80	
et d'Yoho	80			80	
Parcs de Glacier	35			35	
et de Revelstoke	35			35	

*Parcours modifié et raccourci.

tableau no 1

Nombre total de milles
de route désignée
et de milles pavés

Province	Nombre de milles	Nombre de milles pavés ¹
Terre-Neuve	540	525
Ile-du-Prince-Edouard	71	71
Nouvelle-Ecosse	318	274
Nouveau-Brunswick	390	307
Québec	399	325
Ontario	1,453	1,405
Manitoba	309	309
Saskatchewan	406	406
Alberta	282	282
Colombie-Britannique	552	550
Parcs nationaux	140	140
Totaux	4,860	4,594

¹.Y compris le nombre de milles de route désignée, pavés avant le 10 décembre 1949.
La différence entre le "Nombre de milles pavés" et le "Nombre de milles" indique le nombre de milles en construction. Il est possible de rouler d'un bout à l'autre, soit sur les tronçons en construction, soit sur d'autres routes avoisinantes.

ROUTE TRANSCANADIENNE TRAVERSANT LES PARCS NATIONAUX

C'est à la Direction du génie (aménagement) du ministère des Travaux publics que l'on doit la construction d'environ 140 milles de route dans les limites de cinq parcs nationaux. La plupart des travaux sont maintenant terminés, sauf le pavage définitif qui sera fait plus tard ainsi que de petites modifications pour améliorer l'écoulement des eaux. Voici le détail des travaux entrepris au cours de la période de construction de 1965 :

Parc national de Glacier

Le contrat pour le revêtement en pierre du pare-neige Pioneer no 1, est terminé. On a exécuté des travaux de réparation, solidifié les fondations, amélioré l'écoulement des eaux et ensemené par hélicoptère les ouvrages de protection contre les avalanches. On a fait entrepris sous contrat l'aménagement des talus au mille 1.2. On a fait des études sur les pare-neige afin de continuer à construire des ouvrages de protection contre les avalanches.

Les tableaux et les graphiques qui suivent contiennent des données statistiques sur l'état d'avancement de la route depuis le 10 décembre 1949 jusqu'au 31 mars 1966 et comprennent des renseignements qui touchent particulièrement à l'année financière dont le présent rapport fait l'objet.

STATISTIQUE DE LA ROUTE

province. On a prolongé la période de construction jusqu'au 31 décembre 1960 et porté à \$250 millions le montant global que le Canada pouvait dépenser à cet égard.

Aux termes de la loi modifiée, de nouveaux accords ont été conclus avec chacune des provinces participantes. Ces accords stipulaient que la route devrait être terminée pour le 31 décembre 1960 en conformité du devis général de la liste "B", ou qu'elle devrait répondre aux normes d'une bonne route pavée. Cette stipulation écartait la nécessité pour une province de reconstruire des tronçons de route qui étaient déjà pavés selon des normes provinciales satisfaisantes et permettait d'accélérer le travail aux tronçons où la reconstruction et le pavage étaient plus impérieux.

De nouvelles lois promulguées en 1959 et en 1960 ont prolongé la période de construction jusqu'au 31 décembre 1963 et ont porté la contribution du Canada à un maximum de \$400 millions.

La Province de Québec a conclu un accord sur la route transcanadienne le 27 octobre 1960.

En 1963, le Parlement a permis de prolonger la période de construction jusqu'au 31 décembre 1967 et d'accroître la contribution du Canada à un maximum de \$625 millions. Cette loi stipule aussi que le Gouvernement fédéral paierait 90 p. 100 du coût de construction de la route dans les provinces Maritimes, à partir du 1er avril 1963.

ETAT D'AVANCEMENT DE LA CONSTRUCTION

Le montant total des contributions du gouvernement fédéral a atteint un nouveau record durant l'année financière alors qu'il s'est chiffré par \$83,423,000. La contribution approuvée du Canada à l'égard des nouveaux travaux a augmenté de \$50,337,000 et la valeur totale des travaux exécutés ou en voie d'exécution aux termes des conventions sur la route transcanadienne est à peine inférieure à \$1 billion.

Le nombre de milles de la route pour lequel on avait approuvé le nivellement au 31 mars 1966 s'élève à un total de 4,210, dont 4,139 sont terminés. Le nombre de milles pour lequel on avait approuvé le pavage était au total de 4,245, dont 4,139 sont finis. Des 841 ouvrages d'art dont on avait approuvé la construction, 787 sont achevés.

**Rapport sur les travaux exécutés en conformité
de la Loi sur la route transcanadienne
POUR L'ANNÉE FINANCIÈRE TERMINÉE LE 31 MARS 1966**

LA LOI SUR LA ROUTE TRANSCANADIENNE

Les accords initiaux sur la construction de la route prévus à la Loi de 1949 sur la route transcanadienne (2^e session), chapitre 40, article 1, ont été conclus avec les provinces de l'Ontario, du Manitoba, de la Colombie-Britannique, de l'Île-du-Prince-Édouard, de la Saskatchewan et de l'Alberta le 24 avril 1950, avec la province du Nouveau-Brunswick le 27 mai 1950, avec la province de Terre-Neuve le 23 juin 1950 et avec la province de la Nouvelle-Écosse le 15 mai 1952.

Selon les termes des accords initiaux, et aussi de la Loi, une route pavée dont le tracé s'étendrait de la côte est à la côte ouest du Canada devait être construite et terminée pour le 9 décembre 1956. Les accords stipulaient en outre que le Canada acquitterait 50 p. 100 du coût de toute nouvelle construction et jusqu'à concurrence de 50 p. 100 du coût des tronçons de routes construits antérieurement pourvu que ces tronçons fissent bien partie de la route transcanadienne. Le montant global de la contribution du Canada était limité, aux termes de la Loi, à \$150,000,000.

La loi stipulait également que le ministre pouvait payer à même les fonds affectés par le Parlement les frais de construction des routes traversant les parcs et faisant partie d'une route transcanadienne.

Aux premiers stades du projet, les provinces en général ont eu à faire face à maints problèmes relatifs à l'extension du programme de construction. Les travaux ont démarré lentement en 1950 et, bien que la construction se soit ensuite poursuivie à un rythme accéléré, la plupart des provinces ont éprouvé des difficultés à affecter, dans le cadre de leur budget annuel, les sommes nécessaires aux travaux qui auraient permis d'achever la route dans le délai de sept ans stipulé à la Loi de 1949. Lors d'une conférence fédérale-provinciale sur les routes, tenue en novembre 1955, on a débattu la question du nombre de milles non terminés. Les décisions prises à cette conférence ont abouti à une modification de la Loi sur la route transcanadienne, apportée en 1956. Cette modification donnait plus d'ampleur à la contribution du Canada au coût de la construction en autorisant un apport contributaire supplémentaire de 40 p. 100 à l'égard d'un dixième du nombre de milles de la route dans chaque

table des matières

9	LOI SUR LA ROUTE TRANSCANADIENNE
10	ETAT D'AVANCEMENT DE LA CONSTRUCTION
11	ROUTE TRANSCANADIENNE TRAVERSANT LES PARCS NATIONAUX
12	STATISTIQUE DE LA ROUTE
	Tableau 1 - Nombre de milles, etc.
	Tableau 2 - Nivellement
	Tableau 3 - Pavage
	Tableau 4 - Résumé des engagements contractuels
	Tableau 5 - Résumé des paiements faits aux gouvernements provinciaux
	Graphique 1 - Engagements et Paiements Contractuels
	Graphique 2 - Nombre de milles
19	APPENDICES
19	A - Devis général
21	B - Ingénieurs régionaux fédéraux
23	C - Cartes de la Route

L'honorable
GEORGE J. MCILRAITH,
Ministre des travaux publics,
Ottawa.

Monsieur,

J'ai l'honneur de vous soumettre le dix-septième
rapport annuel sur les travaux exécutés en
conformité de la Loi sur la route trans-
canadienne, chapitre 269, Statuts révisés du
Canada (1952), pour l'année financière
terminée le 31 mars 1966.

Votre obéissant serviteur,

LUCIEN LALONDE,

Sous-ministre.

A son Excellence
le major-général
GEORGES-P. VANIER, D.S.O., M.C., C.D.,
Gouverneur général et Commandant en chef du
Canada.

Excellence,

Le sousigné a l'honneur de présenter à Votre
Excellence le rapport annuel sur les travaux
exécutés en conformité de la Loi sur la route
transcanadienne, chapitre 269, Statuts révisés
du Canada (1952), pour l'année financière
terminée le 31 mars 1966.

Respectueusement soumis
GEORGE J. McILRAITH

Ministre des Travaux publics.

N° de cat.: W41-1966

©
ROGER DUHAMEL, M.S.R.C.
Imprimeur de la Reine et Contrôleur de la Papeterie
Ottawa, 1967



rapport annuel

Ministère des Travaux publics
Direction du Génie
(aménagement)

Travaux exécutés en conformité de

la loi sur la route Transcanadienne

Année financière terminée le
31 MARS 1966

Publication autorisée
par l'Honorable
George J. McIlraith
Ministre des Travaux publics
Ottawa

ROUTE TRANS-CANADIENNE

Ministère des Travaux publics
CANADA

Rapport annuel
pour l'année financière
terminée le 31 mars
1966

